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703	HARMV22	867612	713	183-494	2118		21-54, 68-89
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L0754: 4, L0809: 2, L0666: 2, S0330: 2, L0777: 2, H0663: 1, H0600: 1, H0592: 1, H0586: 1, H0644: 1, H0494: 1, L0772: 1, L0662: 1, L0794: 1, L0665: 1, S0328: 1, H0518: 1, S0004: 1, H0478: 1, L0439: 1, L0779: 1, L0731: 1 and L0759: 1.

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AR052: 6, AR089: 5, AR053: 4, AR055: 4, AR061: 3, AR060: 3, AR096: 3, AR033: 3, AR039: 1, AR104: 1

L0748: 14, L0731: 8, L0666: 6, L0662: 4, L0775: 4, L0740: 4, L0779: 4, L0769: 3, L0659: 3, L0439: 3, L0755: 3, L0588: 3, H0150: 2, H0529: 2, L0763: 2, L0772: 2, L0646: 2, L0655: 2, L0527: 2, L0518: 2, L0783: 2, L0664: 2, L0665: 2, H0547: 2, H0689: 2, S0206: 2, L0751: 2,

704	HSDIY76	867686	714	13 - 1020	2119	Leu-134 to Lys-139.	L0752: 2, L0757: 2, L0758: 2, L0608: 2, L0593: 2, H0556: 1, S0418: 1, S0360: 1, S0410: 1, H0619: 1, H0592: 1, H0586: 1, H0333: 1, H0270: 1, H0251: 1, H0309: 1, T0110: 1, H0545: 1, H0041: 1, H0057: 1, S0051: 1, H0188: 1, L0483: 1, H0553: 1, H0674: 1, H0634: 1, H0272: 1, H0623: 1, H0059: 1, S0450: 1, H0647: 1, S0002: 1, L0761: 1, L0764: 1, L0767: 1, L0768: 1, L0375: 1, L0651: 1, L0784: 1, L0654: 1, L0657: 1, L0515: 1, L0658: 1, L0383: 1, L0809: 1, L0663: 1, L0438: 1, H0519: 1, H0684: 1, H0670: 1, H0672: 1, L0754: 1, L0747: 1, L0750: 1, L0591: 1, L0485: 1, L0595: 1, L0601: 1, S0106: 1, H0668: 1, H0543: 1 and H0423: 1. AR089: 10, AR033: 9, AR060: 8, AR096: 3, AR055: 2, AR061: 2, AR039: 2, AR053: 2, AR052: 1, AR104: 1	1p32-p34	120950, 120960, 130500, 133200, 138140,	304-320, 5-21, 31-47, 255-271

| 705 | HPJEV26 | 867728 | 715 | 132-848 | 2120 | Met-1 to Arg-6, Asp-64 to Leu-75, Arg-80 to Tyr-88, Lys-107 to Leu-114, Leu-159 to Lys-169. | AR053: 9, AR052: 9, AR055: 9, AR039: 8, AR033: 8, AR096: 6, AR089: 6, AR060: 6, AR104: 6, AR061: 4 L0754: 8, L0748: 5, L0794: 3, L0766: 3, L0777: 3, S0116: 2, S0360: 2, L0717: 2, S0222: 2, H0615: 2, H0135: 2, L0659: 2, L0665: 2, H0521: 2, L0439: 2, H0171: 1, H0556: 1, S0342: 1, H0657: 1, H0484: 1, S0046: 1, H0549: 1, H0392: 1, H0486: 1, H0013: 1, H0318: 1, H0597: 1, | S0003: 1, H0031: 1, L0779: 1, S0260: 1 and L0366: 1. | 168360, 171760, 171760, 176100, 176100, 178300, 187040, 230000, 255800, 600101, 600650, 600650, 600722, 600722 | 133-155, 186-203 |

| 706 | HPJEV91 | 867729 | 716 | 208 - 531 | 2121 | Ile-2 to Thr-7, Tyr-74 to Val-79. | H0530: 1, L0471: 1, T0010: 1, S0340: 1, H0328: 1, H0688: 1, H0622: 1, L0483: 1, H0553: 1, H0644: 1, H0591: 1, H0038: 1, H0264: 1, H0494: 1, H0625: 1, S0372: 1, H0633: 1, L0769: 1, L0796: 1, L0761: 1, L0649: 1, L0775: 1, L0776: 1, L0809: 1, L0792: 1, L0666: 1, L0663: 1, L0664: 1, H0144: 1, H0689: 1, H0658: 1, S0152: 1, H0436: 1, L0749: 1, L0750: 1, L0779: 1, L0752: 1, L0731: 1, L0758: 1, L0591: 1, L0608: 1, L0362: 1, H0668: 1 and S0026: 1. AR055: 8, AR096: 5, AR060: 5, AR061: 4, AR033: 4, AR053: 4, AR089: 3, AR052: 3, AR039: 2, AR104: 0 H0486: 2, H0494: 2, L0749: 2, L0759: 2, L0591: 2, L0361: 2, H0676: 1, S0003: 1, H0688: 1, H0553: 1, L0764: 1, L0768: 1, L0794: 1, L0766: 1, L0803: 1, L0792: 1, L0793: 1, | 37-74, 14-30 |

707	HAMGK18	867752	717	33 - 485	2122	AR033: 5, AR055: 4, AR052: 4, AR053: 3, AR104: 3, AR060: 3, AR096: 3, AR089: 2, AR039: 1, AR061: 1 S0126: 6, H0046: 4, S0003: 3, L0794: 3, L0766: 3, L0439: 3, L0747: 3, L0759: 3, S0278: 2, L0805: 2, L0740: 2, L0745: 2, L0755: 2, L0595: 2, H0624: 1, H0170: 1, S0116: 1, H0341: 1, H0638: 1, S0420: 1, S0442: 1, S0358: 1, H0437: 1, H0574: 1, H0036: 1, H0581: 1, L0040: 1, H0457: 1, H0373: 1, S0214: 1, H0039: 1, H0031: 1, H0598: 1, H0090: 1, H0616: 1, H0551: 1, H0560: 1, H0646: 1, S0426: 1, L0769: 1, L0662: 1, L0803: 1, L0776: 1, L0438: 1, H0659: 1, H0658: 1, H0648: 1, S0152: 1, H0521: 1, H0522: 1, L0780: 1, L0758: 1,	Met-4 to Gln-9, Gln-16 to Pro-21, Phe-60 to Asp-67, Ser-118 to Ser-129, Thr-134 to Trp-144.	L0438: 1, H0520: 1, S0126: 1, H0659: 1, H0648: 1, S0152: 1, L0755: 1 and S0436: 1.	102-118

708	HCHOH94	867777	718	55 - 570	2123	Arg-32 to Ser-39, Pro-64 to Ser-69.	S0436: 1 and S0242: 1. AR055: 2, AR033: 2, AR089: 1, AR052: 1, AR060: 1, AR096: 1, AR061: 1, AR053: 1, AR104: 0, AR039: 0 H0484: 1, S0358: 1, H0069: 1, T0041: 1 and H0543: 1.	121-151, 68-84, 145-161
709	HPJDA25	867778	719	336 - 818	2124	Ser-4 to Ser-14, Pro-39 to Ser-44.	AR055: 8, AR060: 4, AR033: 4, AR061: 4, AR052: 3, AR096: 3, AR089: 3, AR039: 2, AR104: 1, AR053: 1 H0553: 1, S0152: 1 and H0423: 1.	95-123, 43-59
710	HJACF33	867890	720	187 - 528	2125	Pro-22 to Glu-27, Leu-69 to Ser-76, Gln-107 to Glu-114.	AR096: 45, AR089: 41, AR033: 27, AR060: 22, AR053: 21, AR052: 17, AR039: 17, AR055: 15, AR104: 11, AR061: 8 L0753: 2, S0114: 1, H0486: 1, H0166: 1, T0041: 1, H0521: 1, H0444: 1, L0366: 1, H0543: 1 and H0677: 1.	48-69
711	HHFMP57	867925	721	2353 - 1079	2126	Cys-6 to Arg-20, Arg-27 to Glu-38, Leu-165 to Ala-171,	AR055: 9, AR096: 6, AR033: 6, AR060: 6, AR052: 5, AR061: 4,	252-268, 391-407, 317-333,

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AR104: 44, AR060: 37,

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AR104: 2, AR039: 1
L0748: 5, H0656: 3,
S0045: 3, H0486: 3, H0599:
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H0682: 2, H0658: 2, H0436:
2, S0028: 2, H0542: 2,
H0265: 1, H0556: 1, S0040:
1, H0458: 1, S0360: 1,
H0619: 1, H0392: 1, H0635:
1, S0280: 1, H0042: 1,
H0581: 1, H0052: 1, L0471:
1, H0620: 1, H0024: 1,
H0107: 1, T0010: 1, H0179:
1, H0271: 1, H0328: 1,
H0264: 1, H0488: 1, H0494:
1, H0529: 1, L0761: 1,
L0766: 1, L0629: 1, L0657:
1, L0636: 1, L0666: 1,
L0665: 1, H0519: 1, H0689:
1, H0670: 1, H0521: 1,
S0032: 1, L0743: 1, L0744:
1, L0747: 1, L0750: 1,
L0731: 1, L0758: 1, H0543:
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H0352: 1. | 131-148,
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719	HAPTE80	868238	729	150 - 1091	2134	Ser-15 to Leu-22, Glu-166 to Glu-173, Lys-181 to Met-186.	AR052: 8, AR055: 8, AR033: 6, AR053: 5, AR060: 5, AR089: 4, AR096: 4, AR061: 3, AR104: 2, AR039: 1 H0144: 3, S0114: 1, H0619: 1, T0114: 1, H0575: 1, L0483: 1, H0435: 1, H0539: 1, L0439: 1, L0588: 1 and L0592: 1.	230000, 230350, 255800, 602771	70-89, 32-49, 91-107
720	HSLJC72	868253	730	74 - 412	2135	Tyr-10 to Asp-15, Asp-64 to Gly-72, Gln-74 to Lys-85.	AR052: 866, AR096: 756, AR089: 424, AR060: 372, AR053: 278, AR104: 179, AR033: 176, AR039: 159, AR061: 108, AR055: 30		15-41, 41-63, 86-107
721	HWBCR21	868312	731	173 - 514	2136	Phe-95 to Glu-105.	AR053: 4, AR052: 4, AR096: 4, AR039: 4, AR033: 3, AR089: 3, AR060: 2, AR104: 2, AR055: 2, AR061: 1 S0408: 1, H0580: 1, H0486: 1, H0012: 1, L0794: 1, L0803: 1, L0805: 1, L0790: 1, L0792: 1 and L0		67-95, 1-19, 52-68, 24-40

722	HKAAU27	868368	732	1016 - 1375	2137	Leu-40 to Asp-48, Lys-92 to Gly-98.	H0522: 1. AR096: 5, AR052: 4, AR033: 4, AR053: 3, AR089: 3, AR055: 2, AR104: 2, AR060: 2, AR061: 2, AR039: 0 H0617: 2, L0662: 2, L0779: 2, L0759: 2, H0716: 1, H0583: 1, H0580: 1, H0549: 1, H0643: 1, L0021: 1, H0581: 1, H0051: 1, H0688: 1, H0059: 1, H0494: 1, H0695: 1, L0770: 1, L0761: 1, L0766: 1, L0803: 1, L0809: 1, H0436: 1, H0540: 1, L0756: 1, L0608: 1, L0603: 1 and S0026: 1.	71-91, 15-35
723	HOSCJ09	868369	733	42 - 659	2138	Asn-38 to Phe-46.	AR055: 12, AR053: 11, AR033: 10, AR052: 10, AR039: 10, AR060: 10, AR096: 9, AR104: 8, AR089: 8, AR061: 6 L0439: 7, L0805: 4, S0003: 2, L0438: 2, S0114: 1, L0415: 1, S0358: 1, H0580: 1, H0619: 1, H0013: 1, H0036: 1, S0474: 1, H0251: 1, S0388: 1, L0761: 1, L0667: 1, L0794: 1,	16-35, 159-176, 55-71, 101-117, 138-154

724	HWBAE15	868370	734	746 - 1093	2139	Asn-53 to Phe-61.	L0523: 1, L0776: 1, L0659: 1, L0809: 1, L0787: 1, L0790: 1, L0666: 1, H0593: 1, H0711: 1, L0756: 1, L0779: 1, L0755: 1, L0591: 1 and H0423: 1. AR052: 1, AR053: 1, AR033: 1, AR061: 0, AR039: 0, AR089: 0, AR096: 0, AR104: 0, AR060: 0, AR055: 0 L0438: 4, L0439: 4, S0003: 3, L0805: 3, L0415: 2, S0114: 1, S0358: 1, H0580: 1, H0619: 1, H0013: 1, H0036: 1, S0474: 1, H0251: 1, S0388: 1, L0761: 1, L0667: 1, L0794: 1, L0523: 1, L0776: 1, L0659: 1, L0809: 1, L0787: 1, L0790: 1, L0666: 1, H0593: 1, H0711: 1, L0756: 1, L0779: 1, L0755: 1 and H0423: 1.	31-50, 70-86
725	HWAFN46	868440	735	242 - 601	2140	Pro-28 to Pro-34, Glu-46 to Lys-51, Ala-73 to Pro-80.	AR052: 2, AR096: 2, AR033: 1, AR055: 1, AR053: 1, AR060: 1, AR089: 1, AR061: 1, AR104: 0	79-103, 52-69

726	HWAET91	868475	736	201 - 641	2141	Ser-35 to Gln-42, Ser-94 to Glu-101.	H0581: 1 and S0250: 1. AR096: 3, AR089: 2, AR039: 2, AR052: 2, AR060: 2, AR053: 1, AR033: 1, AR061: 1, AR055: 1, AR104: 1 H0581: 1, L0766: 1 and L0749: 1.	55-81, 123-141, 79-95, 43-59, 18-34
727	HDPMO69	868484	737	120 - 941	2142	Ser-12 to Tyr-18, Glu-34 to Val-45, Pro-71 to Asn-76, Tyr-84 to Lys-95, Thr-153 to Tyr-158, Glu-241 to Tyr-250, Asp-252 to Gln-263.	AR060: 1, AR096: 1, AR089: 1, AR104: 1, AR055: 1, AR061: 1, AR053: 0, AR033: 0, AR039: 0, AR052: 0 S0036: 2, L0754: 2, L0596: 2, T0049: 1, H0632: 1, H0069: 1, H0098: 1, H0581: 1, H0375: 1, L0794: 1, L0766: 1, L0803: 1, H0519: 1, H0660: 1, H0521: 1, H0522: 1, L0745: 1, S0196: 1 and H0423: 1.	93-120, 215-231
728	HELHM41	868568	738	322 - 1812	2143	Met-1 to Arg-7, Leu-11 to Lys-18, Ser-25 to Trp-33, Asn-67 to Asn-73, Glu-133 to Leu-147.	AR055: 8, AR060: 5, AR052: 5, AR033: 4, AR053: 4, AR039: 4, AR089: 3, AR096: 3, AR061: 2, AR104: 2 L0748: 11, L0438: 4, L0758: 4, H0038: 3, H0521: 3, L0731: 3, S0222: 2,	102-122, 150-166, 275-291, 393-409, 244-260, 170-186

729	HEQCA95	868765	739	75 - 614	2144	Gln-21 to Cys-27.		
						H0333: 2, H0050: 2, T0042: 2, L0794: 2, L0766: 2, L0664: 2, H0144: 2, L0759: 2, L0593: 2, H0484: 1, S0418: 1, S0442: 1, S0410: 1, S0045: 1, H0393: 1, L0717: 1, H0411: 1, S0278: 1, H0586: 1, H0642: 1, S0010: 1, S0474: 1, H0421: 1, H0046: 1, H0457: 1, H0051: 1, S0250: 1, H0615: 1, H0039: 1, H0674: 1, H0059: 1, L0564: 1, H0561: 1, S0422: 1, S0426: 1, L0763: 1, L0372: 1, L0641: 1, L0764: 1, L0803: 1, L0774: 1, L0809: 1, L0665: 1, H0698: 1, S0378: 1, H0518: 1, S0152: 1, S0406: 1, S3014: 1, S0027: 1, L0754: 1, L0747: 1, L0749: 1, L0786: 1, L0779: 1, L0752: 1, L0755: 1, L0604: 1, S0192: 1, S0242: 1, H0543: 1 and S0021: 1.	AR096: 23, AR089: 23, AR104: 21, AR033: 16, AR060: 15, AR052: 14, AR053: 11, AR055: 9, AR039: 8, AR061: 3	97-128, 27-55, 64-86, 140-157

| 730 | HAGEG94 | 868792 | 740 | 134 - 580 | 2145 | Thr-6 to Glu-11, Lys-14 to Cys-20, Ser-51 to Ala-58, His-140 to Thr-148. | S0358: 9, H0544: 2, H0545: 2, H0551: 2, S0002: 2, L0803: 2, H0672: 2, L0755: 2, S0420: 1, S0376: 1, S0278: 1, H0635: 1, L0022: 1, H0042: 1, H0575: 1, H0204: 1, H0266: 1, L0194: 1, H0644: 1, H0591: 1, H0634: 1, H0488: 1, H0623: 1, S0344: 1, S0426: 1, L0771: 1, L0804: 1, S0053: 1, H0547: 1, H0435: 1, H0696: 1, S0406: 1, L0751: 1, L0757: 1, S0434: 1, L0591: 1 and S0458: 1. AR055: 8, AR060: 5, AR096: 5, AR061: 4, AR052: 4, AR033: 4, AR089: 4, AR053: 3, AR104: 3, AR039: 2 H0056: 5, L0775: 3, L0439: 3, H0170: 2, S0124: 2, L0740: 2, L0786: 2, S0420: 1, S0442: 1, H0587: 1, H0013: 1, S0010: 1, S0003: 1, H0032: 1, L0763: 1, L0770: 1, L0764: 1, L0768: 1, L0803: 1, L0793: 1, L0666: 1, H0539: 1, L0779: 1, L0777: 1, L0759: | 92-108, 73-89 |

731	HWAFX90	868808	741	146 - 487	2146	Gln-58 to Val-63.	2p22-p21	120435, 120435, 126600, 135300, 136435, 152790, 152790, 157170, 182601, 278300, 601071, 601771, 602134	90-106, 62-78, 35-51, 14-30
						AR089: 16, AR033: 7, AR060: 7, AR104: 5, AR096: 3, AR055: 2, AR052: 2, AR053: 2, AR061: 1, AR039: 1 S0328: 9, L0770: 7, S0418: 6, S0410: 5, H0486: 5, L0455: 3, H0494: 3, H0659: 3, H0666: 3, H0648: 3, L0752: 3, H0624: 2, H0663: 2, H0638: 2, S0420: 2, S0358: 2, S0007: 2, H0393: 2, H0013: 2, H0581: 2, L0471: 2, S0438: 2, S0440: 2, S0144: 2, L0637: 2, L0766: 2, L0651: 2, L0518: 2, L0382: 2, L0519: 2, L0665: 2, H0672: 2, S0380: 2, L0592: 2, H0543: 2, H0171: 1, H0713: 1, T0049: 1, H0583: 1, H0650: 1, H0656: 1, S0354: 1, S0376: 1, S0408: 1, T0008: 1, H0637: 1, H0580: 1, H0351: 1, H0392: 1, H0592: 1, T0114: 1, H0635: 1, H0706: 1, S0182: 1, H0421: 1, H0052: 1, H0571: 1, H0615: 1, S0434: 1, S0436: 1 and H0543: 1.			

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| 732 | HHFGM33 | 868870 | 742 | 244 - 1005 | 2147 | 1, H0688: 1, H0428: 1, T0006: 1, H0644: 1, H0090: 1, H0264: 1, H0488: 1, H0413: 1, H0623: 1, H0059: 1, T0042: 1, L0475: 1, H0561: 1, L0065: 1, S0210: 1, H0529: 1, L0640: 1, L0648: 1, L0768: 1, L0774: 1, L0775: 1, L0379: 1, L0657: 1, L0793: 1, L0666: 1, L0438: 1, H0658: 1, H0660: 1, S0406: 1, H0436: 1, S0390: 1, S3014: 1, L0748: 1, L0750: 1, L0753: 1, L0755: 1, L0758: 1, S0436: 1, H0422: 1 and H0352: 1. AR089: 4, AR033: 4, AR060: 4, AR061: 2, AR096: 1, AR055: 1, AR104: 1, AR052: 0, AR039: 0, AR053: 0 H0521: 3, H0519: 2, H0717: 1, S0442: 1, H0434: 1, H0050: 1, H0615: 1, H0628: 1, H0135: 1, H0412: 1, L0638: 1, H0539: 1, S0152: 1, H0576: 1, S0206: 1, L0740: 1, L0594: 1 and H0543: 1. | 11-37, 71-94, 43-59, 129-145, 104-120, 152-168 |

| 733 | HTEQK83 | 868928 | 743 | 500 - 931 | 2148 | Lys-7 to Ser-16, Tyr-70 to Arg-75. | AR060: 13, AR089: 9, AR052: 8, AR096: 8, AR033: 6, AR053: 4, AR061: 4, AR104: 0, AR055: 0 H0250: 60, S0126: 24, H0013: 9, H0124: 9, H0494: 8, H0521: 7, H0428: 6, H0553: 6, H0038: 6, S0027: 6, S0040: 5, T0039: 5, H0050: 5, L0471: 5, H0644: 5, H0135: 5, H0551: 5, T0067: 5, H0144: 5, H0539: 5, S0028: 5, L0439: 5, L0740: 5, H0171: 4, S0356: 4, S0046: 4, H0586: 4, H0486: 4, H0599: 4, H0046: 4, H0024: 4, H0266: 4, S0003: 4, H0040: 4, H0059: 4, S0152: 4, L0603: 4, H0556: 3, S0222: 3, H0574: 3, H0156: 3, S0010: 3, H0581: 3, H0620: 3, H0014: 3, H0015: 3, H0373: 3, S0022: 3, H0031: 3, H0547: 3, H0519: 3, H0522: 3, L0748: 3, H0624: 2, H0265: 2, H0295: 2, S0212: 2, H0484: 2, H0661: 2, H0125: 2, S0418: 2, H0208: 2, | 75-103, 28-53, 116-132 |

S0045: 2, H0619: 2, H0645: 2, H0550: 2, H0431: 2, H0370: 2, H0427: 2, H0575: 2, H0618: 2, S0049: 2, H0530: 2, H0545: 2, H0012: 2, H0375: 2, H0179: 2, H0286: 2, H0615: 2, H0039: 2, H0622: 2, H0032: 2, H0068: 2, H0090: 2, H0616: 2, H0264: 2, H0268: 2, H0100: 2, T0042: 2, S0294: 2, S0142: 2, H0517: 2, H0651: 2, S0037: 2, H0506: 2, H0157: 1, H0294: 1, H0671: 1, H0662: 1, S0420: 1, S0358: 1, S0376: 1, S0360: 1, H0580: 1, H0393: 1, H0437: 1, H0369: 1, H0549: 1, H0409: 1, H0602: 1, H0587: 1, H0642: 1, L0477: 1, T0040: 1, H0635: 1, H0097: 1, H0036: 1, S0346: 1, H0421: 1, H0230: 1, H0196: 1, H0251: 1, T0115: 1, H0086: 1, H0009: 1, H0081: 1, H0197: 1, H0023: 1, H0023: 1, H0107: 1, T0010: 1, H0271: 1, S0318: 1, S0334: 1, S0316: 1, H0284: 1, S0314: 1,

734	HULFK26	868929	744	141 - 839	2149		
					Lys-7 to Ser-16, Tyr-70 to Arg-75, Pro-135 to Gln-143, Cys-186 to Val-195, Met-221 to Tyr-230.	S0250: 1, S0214: 1, H0328: 1, L0483: 1, H0212: 1, H0708: 1, S0036: 1, H0634: 1, H0488: 1, H0433: 1, H0056: 1, H0623: 1, T0069: 1, H0560: 1, H0561: 1, S0448: 1, S0440: 1, H0509: 1, H0131: 1, S0150: 1, S0144: 1, S0344: 1, S0208: 1, S0210: 1, S0426: 1, H0529: 1, L0384: 1, S0216: 1, S0148: 1, H0593: 1, H0435: 1, H0658: 1, H0666: 1, H0518: 1, S0004: 1, H0134: 1, H0436: 1, S0432: 1, S0390: 1, S3014: 1, L0754: 1, L0746: 1, L0758: 1, L0596: 1, L0605: 1, L0592: 1, L0581: 1, L0593: 1, L0595: 1, S0011: 1, H0668: 1, S0026: 1, S0446: 1 and H0293: 1. AR089: 25, AR096: 23, AR060: 22, AR033: 16, AR104: 10, AR061: 7, AR055: 7, AR052: 6, AR039: 5, AR053: 4, H0250: 60, S0126: 24, H0013: 9, H0124: 9, L0439: 9, H0494: 8, H0521: 7,	150-183, 75-103, 28-53, 111-128

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H0032: 2, H0068: 2, H0090: 2, H0616: 2, H0264: 2, H0268: 2, H0100: 2, T0042: 2, S0294: 2, S0142: 2, H0517: 2, L0809: 2, H0651: 2, S0037: 2, H0506: 2, H0157: 1, H0294: 1, L0785: 1, H0671: 1, H0662: 1, S0420: 1, S0358: 1, S0376: 1, S0360: 1, H0580: 1, H0393: 1, H0411: 1, H0437: 1, H0369: 1, H0549: 1, H0409: 1, H0602: 1, H0587: 1, H0642: 1, L0477: 1, T0040: 1, H0635: 1, H0097: 1, H0036: 1, S0346: 1, H0421: 1, H0230: 1, H0196: 1, H0251: 1, T0115: 1, H0086: 1, H0009: 1, H0081: 1, H0197: 1, H0023: 1, H0023: 1, H0107: 1, H0271: 1, S0318: 1, S0334: 1, S0316: 1, H0284: 1, S0314: 1, S0250: 1, S0214: 1, H0328: 1, H0688: 1, L0483: 1, H0212: 1, H0708: 1, S0036: 1, H0634: 1, H0488: 1, H0433: 1, H0056: 1, H0623: 1, T0069: 1, H0560: 1, H0561: 1, S0448: 1,

| 735 | HSBBS15 | 869055 | 745 | 1523 - 825 | 2150 | Val-25 to Leu-35, Gly-138 to Gly-144. | S0440: 1, H0509: 1, H0131: 1, S0150: 1, S0144: 1, S0344: 1, S0208: 1, S0210: 1, S0426: 1, H0529: 1, L0775: 1, L0384: 1, L0664: 1, S0216: 1, S0148: 1, H0593: 1, H0435: 1, H0658: 1, H0666: 1, H0518: 1, S0004: 1, H0134: 1, H0436: 1, S0432: 1, S0390: 1, S3014: 1, L0754: 1, L0746: 1, L0758: 1, L0596: 1, L0605: 1, L0592: 1, L0581: 1, L0593: 1, L0595: 1, S0011: 1, H0668: 1, S0026: 1, S0446: 1 and H0293: 1. | 11 | 158-175, 91-113, 109-125, 54-70 |
| 736 | HS2IL80 | 869056 | 746 | 127 - 519 | 2151 | Gly-31 to Ser-38. | AR055: 9, AR060: 6, AR033: 5, AR104: 4, AR061: 2, AR039: 2, AR096: 0, AR089: 0, AR053: 0, AR052: 0, S0388: 2, S0418: 1, S0442: 1, T0040: 1, S0280: 1, H0618: 1, H0253: 1, H0545: 1, S0440: 1, H0641: 1, H0519: 1, S0027: 1, L0759: 1 and H0445: 1. | 11 | 51-68 |

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| 737 | HUSZB06 | 869057 | 747 | 47 - 904 | 2152 | Arg-21 to Ala-28, Pro-33 to Ala-40, Pro-42 to Gly-50, Val-163 to Leu-173, Gly-246 to Asn-253. | H0506: 1. AR060: 12, AR061: 7, AR089: 7, AR039: 5, AR104: 3, AR033: 3, AR096: 2, AR055: 1, AR053: 0, AR052: 0 L0659: 10, L0665: 9, T0040: 8, L0519: 8, L0759: 8, L0776: 7, L0749: 7, S0418: 6, L0744: 6, L0747: 6, L0758: 6, S0046: 5, H0052: 5, H0457: 5, H0150: 5, L0769: 5, L0766: 5, L0748: 5, H0265: 4, S0420: 4, S0356: 4, S0360: 4, S0010: 4, H0545: 4, H0494: 4, L0662: 4, L0768: 4, L0774: 4, L0775: 4, S0406: 4, L0751: 4, L0754: 4, L0779: 4, H0295: 3, H0484: 3, S0476: 3, H0549: 3, S0222: 3, H0575: 3, H0581: 3, H0421: 3, H0620: 3, S0051: 3, H0687: 3, H0428: 3, L0764: 3, L0666: 3, H0435: 3, H0648: 3, H0539: 3, H0436: 3, L0750: 3, H0624: 2, H0171: 2, H0556: 2, H0657: 2, H0656: 2, S0354: 2, S0358: 2, S0376: | 11 | 65-81, 192-208, 229-245 |

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S0132: 2, T0039: 2, H0635:
2, H0156: 2, H0599: 2,
H0618: 2, T0048: 2, H0544:
2, H0009: 2, S6028: 2,
T0006: 2, H0604: 2, H0031:
2, H0038: 2, H0087: 2,
H0551: 2, T0067: 2, S0440:
2, H0647: 2, S0344: 2,
L0638: 2, L0372: 2, L0641:
2, L0806: 2, L0653: 2,
L0527: 2, L0809: 2, L0565:
2, L0438: 2, H0689: 2,
H0658: 2, H0672: 2, S0330:
2, S0027: 2, L0741: 2,
L0742: 2, L0596: 2, L0605:
2, S0194: 2, H0543: 2,
L0718: 2, H0506: 2, H0685:
1, H0713: 1, H0294: 1,
T0049: 1, S0212: 1, S0110:
1, S0282: 1, H0483: 1,
H0638: 1, S0442: 1, H0637:
1, S0468: 1, H0550: 1,
H0642: 1, H0559: 1, L0622:
1, H0486: 1, H0013: 1,
H0250: 1, H0069: 1, S0280:
1, H0706: 1, H0253: 1,
S0346: 1, H0705: 1, H0318:
1, S0049: 1, L0040: 1,
H0597: 1, L0738: 1, H0050:

1, L0471: 1, H0012: 1, H0024: 1, H0014: 1, H0373: 1, S0388: 1, H0239: 1, H0594: 1, H0271: 1, H0292: 1, H0213: 1, H0628: 1, H0673: 1, H0068: 1, S0036: 1, H0135: 1, H0090: 1, H0634: 1, H0488: 1, H0268: 1, H0412: 1, H0413: 1, S0038: 1, T0042: 1, H0560: 1, H0641: 1, S0210: 1, S0002: 1, H0529: 1, L0770: 1, L0637: 1, L5566: 1, L0761: 1, L0772: 1, L0646: 1, L0374: 1, L0771: 1, L4500: 1, L0375: 1, L0651: 1, L0784: 1, L0807: 1, L0657: 1, L0658: 1, L0656: 1, L0782: 1, L0783: 1, L0530: 1, L0647: 1, L0788: 1, L0663: 1, L0664: 1, S0216: 1, H0144: 1, H0693: 1, H0520: 1, H0547: 1, H0519: 1, S0126: 1, H0659: 1, S0328: 1, S0380: 1, H0710: 1, H0522: 1, H0627: 1, S3014: 1, S0028: 1, L0439: 1, L0740: 1, L0756: 1, L0786: 1, L0780: 1, L0755: 1, S0434: 1, S0436:

738	HUCNM83	869060	748	257 - 610	2153	Thr-29 to Thr-69.	1, L0581: 1, L0595: 1, L0601: 1, H0667: 1, S0192: 1, H0542: 1 and S0424: 1. AR039: 86, AR052: 69, AR096: 65, AR053: 61, AR089: 55, AR060: 38, AR104: 36, AR033: 35, AR055: 18, AR061: 11 H0486: 3, H0641: 3, L0766: 3, L0748: 3, L0731: 3, L0757: 3, T0040: 2, L0770: 2, L0794: 2, L0805: 2, H0519: 2, H0521: 2, H0638: 1, S0420: 1, L0021: 1, H0581: 1, L0471: 1, H0090: 1, H0412: 1, L0761: 1, L0764: 1, L0767: 1, L0803: 1, L0806: 1, L0776: 1, H0659: 1, H0522: 1, L0747: 1, L0779: 1, L0777: 1, L0780: 1, L0759: 1 and H0543: 1.	96-114, 10-26, 76-92
739	HUCNW47	869091	749	88 - 474	2154	Met-1 to Phe-8.	AR039: 7, AR096: 5, AR053: 5, AR089: 5, AR052: 5, AR033: 5, AR104: 4, AR055: 4, AR060: 3, AR061: 2 L0754: 6, S0420: 5, L0758: 5, H0617: 3, H0521:	104-124, 42-60, 70-88

740	HEMGJ42	869128	750	213 - 662	2155	Trp-8 to Ser-16.			85-101
						3, L0741: 3, L0742: 3, L0743: 3, L0744: 3, H0242: 2, L0662: 2, L0775: 2, S0126: 2, L0748: 2, L0740: 2, L0751: 2, L0592: 2, S0040: 1, H0294: 1, H0657: 1, S0212: 1, H0662: 1, S0418: 1, S0132: 1, H0442: 1, H0497: 1, H0052: 1, H0545: 1, H0041: 1, H0292: 1, T0023: 1, H0124: 1, S0036: 1, H0412: 1, H0413: 1, H0059: 1, L0770: 1, L5575: 1, L0650: 1, L0651: 1, L0554: 1, L0805: 1, L0776: 1, L0661: 1, L0809: 1, L0792: 1, L0664: 1, L0665: 1, H0520: 1, H0690: 1, H0682: 1, H0672: 1, H0651: 1, H0436: 1, L0611: 1, L0439: 1, L0747: 1, L0750: 1, L0756: 1, L0755: 1, S0436: 1, L0581: 1, S0196: 1, H0506: 1 and H0352: 1.	AR039: 19, AR033: 15, AR053: 14, AR052: 9, AR060: 8,	AR055: 19, AR104: 14, AR089: 12, AR096: 9, AR061: 8	

#	Clone ID				SEQ ID	Amino Acid Ranges	Clone Distribution	Chromosome	OMIM	Residues
741	HUSYN11	869192	751	505 - 1443	2156	Met-1 to Glu-6, Gly-15 to Ser-28, Arg-33 to Glu-49, Asn-56 to Tyr-65, Leu-105 to Phe-120, Leu-130 to Ser-142.	AR039: 19, AR052: 12, AR053: 11, AR055: 10, AR060: 7, AR104: 7 H0413: 1 S0046: 2, S0360: 1, H0123: 1, H0059: 1, L0662: 1, H0658: 1 and L0589: 1.			67-99
742	HTADJ34	869206	752	141 - 620	2157	Ser-5 to Ser-10, Ala-19 to Leu-24, Val-31 to Leu-37, Arg-76 to Lys-81, Leu-84 to Glu-92.	AR052: 53, AR033: 23, AR053: 15, AR096: 7, AR089: 6, AR060: 6, AR061: 4, AR055: 4, AR104: 2, AR039: 1 H0292: 2, H0059: 2, H0149: 1, H0294: 1, S0282: 1, H0484: 1, H0483: 1, H0661: 1, S0418: 1, H0619: 1, H0550: 1, H0069: 1, H0051: 1, T0010: 1, H0266: 1, S0364: 1, H0063: 1, H0560: 1, H0646: 1, H0538: 1, H0520: 1, H0547: 1, H0593: 1, S0126: 1, S0380: 1, S0390: 1, S3014: 1, L0750: 1 and H0543: 1.	2p12	147200, 178640, 216900	54-76
743	HTXPR30	869227	753	196 - 879	2158		AR055: 10, AR052: 7, AR060: 5, AR061: 5, AR053: 4, AR089: 4,			102-128, 72-94, 160-183,

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AR039: 4, AR096: 3,
AR033: 3, AR104: 3
H0046: 6, L0766: 6,
H0547: 6, H0494: 5, L0748: 5, L0439: 5, H0013: 4,
L0772: 4, L0646: 4, L0768: 4, L0747: 4, L0758: 4,
H0556: 3, H0393: 3, H0586: 3, H0331: 3, H0069: 3,
H0545: 3, H0050: 3, L0662: 3, L0659: 3, S0037: 3,
L0750: 3, L0757: 3, L0595: 3, L0362: 3, H0294: 2,
T0049: 2, S0418: 2, S0132: 2, H0587: 2, H0486: 2,
H0575: 2, S0049: 2, H0052: 2, H0051: 2, H0083: 2,
H0266: 2, H0622: 2, L0455: 2, H0124: 2, H0068: 2,
S0036: 2, H0264: 2, H0100: 2, S0440: 2, L0764: 2,
L0649: 2, L0375: 2, L0783: 2, L0529: 2, L0665: 2,
H0519: 2, L0602: 2, L0744: 2, L0756: 2, S0434: 2,
L0599: 2, L0608: 2, L0593: 2, L0594: 2, H0422: 2,
H0265: 1, S0040: 1, H0341: 1, H0125: 1, S0420: 1,
L0717: 1, H0351: 1, S0222: 1.

| 744 | HAHDP69 | 869268 | 754 | 6 - 2453 | 2159 | 1, H0441: 1, H0431: 1, H0257: 1, H0559: 1, T0039: 1, H0635: 1, H0427: 1, S0280: 1, L0022: 1, H0036: 1, S0010: 1, S0182: 1, H0581: 1, H0596: 1, H0544: 1, H0150: 1, H0123: 1, H0350: 1, S0388: 1, S0051: 1, H0271: 1, H0288: 1, H0674: 1, L0456: 1, H0316: 1, H0040: 1, T0041: 1, S0438: 1, H0509: 1, S0208: 1, S0002: 1, L0763: 1, L0637: 1, L0767: 1, L0803: 1, L0774: 1, L0775: 1, L0376: 1, L0806: 1, L0790: 1, L0792: 1, L0666: 1, L0663: 1, H0690: 1, H0435: 1, H0659: 1, H0670: 1, S0328: 1, H0522: 1, H0134: 1, H0555: 1, S0028: 1, L0740: 1, L0754: 1, L0749: 1, L0779: 1, L0759: 1, L0591: 1, L0366: 1, S0194: 1, H0542: 1, H0543: 1, H0423: 1, H0506: 1 and H0352: 1. AR052: 7, AR053: 6, AR089: 5, AR055: 4, AR033: 4, AR096: 4, | 185-206, 48-66, 374-390, |

663-679,
111-127,
319-335,
469-485

AR061: 3, AR060: 3, AR104: 2, AR039: 0
H0556: 12, H0251: 4, S0420: 3, H0013: 3, H0083: 3, H0266: 3, H0264: 3, H0561: 3, L0439: 3, S0046: 2, S0132: 2, H0124: 2, H0135: 2, H0560: 2, S0216: 2, H0547: 2, L0748: 2, H0624: 1, H0265: 1, S0040: 1, S0134: 1, S0430: 1, H0583: 1, H0341: 1, S0212: 1, H0484: 1, S0418: 1, S0356: 1, S0045: 1, H0619: 1, H0351: 1, H0587: 1, H0599: 1, H0590: 1, H0581: 1, H0052: 1, H0046: 1, H0041: 1, S0250: 1, L0456: 1, H0040: 1, S0038: 1, H0100: 1, T0041: 1, T0042: 1, H0494: 1, S0370: 1, H0130: 1, H0529: 1, L0772: 1, L0373: 1, L0764: 1, L0774: 1, L0790: 1, L0665: 1, S0053: 1, H0519: 1, H0435: 1, H0660: 1, L0602: 1, S0152: 1, H0522: 1, S0044: 1, H0555: 1, H0436: 1, S0390: 1, S3014: 1, S0028: 1, L0743: 1, L0777:

745	HTXBF16	869270	755	119 - 586	2160	Arg-17 to Val-23.	1, L0759: 1, S0260: 1, H0445: 1, L0596: 1, L0592: 1, L0485: 1, L0593: 1, L0601: 1, S0011: 1, H0543: 1 and H0423: 1.	29-46, 115-134, 78-94, 51-67
							AR033: 9, AR089: 3, AR052: 2, AR060: 2, AR055: 2, AR096: 1, AR053: 1, AR061: 1, AR104: 0	
							H0556: 6, H0424: 3, H0265: 1, H0306: 1, H0402: 1, L0794: 1 and L0366: 1.	
746	HTXLG13	869344	756	523 - 1020	2161		AR033: 58, AR052: 43, AR053: 34, AR055: 34, AR089: 24, AR061: 18, AR060: 16, AR096: 12, AR104: 8, AR039: 3	51-67, 71-87
747	HEOMD27	869349	757	722 - 1102	2162	Arg-13 to Glu-22, Ser-34 to Phe-44, Ser-46 to Thr-52.	AR052: 9, AR039: 8, AR053: 8, AR096: 6, AR033: 6, AR089: 5, AR055: 4, AR104: 4, AR060: 3, AR061: 2	72-89, 52-68
							H0457: 6, H0486: 5, L0439: 5, L0794: 4, L0803: 4, L0742: 4, L0754: 4, L0777: 3, L0599: 3, H0156: 2, H0599: 2, H0014: 2,	

748	HTXHA69	869387	758	46 - 408	2163	Asp-35 to Gly-40, Arg-64 to Val-69.	L0771: 2, L0809: 2, H0478: 2, L0743: 2, L0748: 2, L0749: 2, L0757: 2, L0758: 2, L0595: 2, H0556: 1, H0656: 1, S0418: 1, S0444: 1, L0717: 1, S0222: 1, H0632: 1, T0040: 1, H0052: 1, H0544: 1, L0041: 1, H0373: 1, H0039: 1, H0424: 1, H0405: 1, H0031: 1, H0644: 1, L0055: 1, H0038: 1, H0634: 1, H0551: 1, H0509: 1, S0422: 1, L0761: 1, L0372: 1, L0768: 1, L0766: 1, L0388: 1, L0774: 1, L0775: 1, L0805: 1, L0653: 1, L0776: 1, L0655: 1, L0659: 1, L0526: 1, L0788: 1, L0789: 1, L0666: 1, H0547: 1, H0519: 1, H0672: 1, S0152: 1, L0731: 1, S0031: 1, H0445: 1, L0591: 1, S0242: 1, S0194: 1, S0196: 1 and H0352: 1. AR104: 20, AR033: 18, AR055: 15, AR052: 11, AR060: 9, AR053: 8, AR039: 8, AR096: 8, AR089: 7, AR061: 6 L0142: 2, L0770: 2,			43-60

749	HFTCV95	869639	759	1877 - 759	2164	Arg-11 to Arg-18.	AR052: 19, AR053: 18, AR089: 16, AR096: 13, AR055: 13, AR060: 12, AR033: 12, AR104: 8, AR039: 7, AR061: 7 H0253: 2, H0520: 2, S0126: 2, L0759: 2, H0556: 1, H0657: 1, S0116: 1, H0450: 1, S0046: 1, H0492: 1, S0049: 1, H0123: 1, H0050: 1, S0036: 1, H0494: 1, H0435: 1, H0670: 1, H0539: 1 and L0731: 1.	L0438: 2, L0439: 2, L0752: 2, H0265: 1, S0222: 1, H0013: 1, H0572: 1, H0083: 1, L0455: 1, L0763: 1, L0767: 1, L0748: 1, L0755: 1 and L0592: 1.	198-214, 285-301
750	HTEHC92	869786	760	52 - 456	2165	Met-1 to Lys-8, Arg-20 to Leu-29, Lys-55 to Leu-63, Ser-77 to Gly-83, Pro-126 to Phe-135.	AR055: 7, AR060: 4, AR039: 4, AR052: 4, AR033: 4, AR089: 4, AR104: 4, AR061: 3, AR053: 3, AR096: 2 H0253: 4, H0038: 4, L0794: 4, L0748: 4, L0754: 4, H0677: 4, H0618: 3, H0616: 3, L0806: 3, L0758: 3, H0013: 2, S0150: 2,		100-118, 62-78

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751	HTFOL05	869816	761	2003 – 1422	2166	Glu-7 to Phe-12, Pro-49 to Phe-56, Gly-65 to Val-71.	AR039: 1, AR104: 1, AR096: 0, AR061: 0, AR053: 0, AR055: 0, AR089: 0, AR060: 0, AR033: 0 L0591: 10, H0622: 5, S0422: 3, L0803: 3, L0438: 3, L0750: 3, S0134: 2, H0663: 2, H0599: 2, H0050: 2, H0687: 2, L0764: 2, L0662: 2, L0766: 2, L0748: 2, L0779: 2, L0777: 2, L0599: 2, S0196: 2, H0265: 1, H0556: 1, H0662: 1, L0481: 1, S0356: 1, H0580: 1, S0046: 1, S0300: 1, S0222: 1, H0431: 1, H0574: 1, S0474: 1, H0052: 1, H0309: 1, H0083: 1, H0428: 1, H0031: 1, H0644: 1,	166-191
							L0665: 2, L0439: 2, H0661: 1, S0418: 1, S0410: 1, S0007: 1, S6026: 1, S0300: 1, L0717: 1, H0050: 1, H0266: 1, H0622: 1, L0769: 1, L0637: 1, L0372: 1, L0805: 1, L0776: 1, L0790: 1, S0328: 1, S0206: 1, L0589: 1, H0665: 1 and H0422: 1.	

| 752 | HTPDV70 | 869874 | 762 | 67 - 501 | 2167 | His-2 to Gln-16, Gly-23 to Ser-28, Met-40 to Asn-45, Gln-76 to Leu-91. | H0628: 1, L0055: 1, H0038: 1, H0616: 1, H0560: 1, H0529: 1, L0372: 1, L0768: 1, L0794: 1, L0519: 1, L0666: 1, L0665: 1, S0216: 1, H0144: 1, S0330: 1, H0518: 1, S0332: 1, S0146: 1, H0555: 1, S0027: 1, L0439: 1, L0754: 1, L0756: 1, L0731: 1, L0595: 1, S0194: 1, H0543: 1, H0423: 1 and S0424: 1. | AR053: 16, AR096: 14, AR052: 14, AR055: 12, AR089: 9, AR060: 8, AR033: 6, AR061: 6, AR104: 4, AR039: 4 H0591: 2, H0521: 2, S0046: 1, S0010: 1, H0039: 1, H0641: 1, H0519: 1 and H0543: 1. | 58-74, 114-130 |
| 753 | HLYGH73 | 869917 | 763 | 808 - 2 | 2168 | Pro-18 to Leu-46. | | AR033: 6, AR089: 4, AR060: 4, AR061: 3, AR039: 3, AR053: 3, AR096: 2, AR052: 2, AR055: 2, AR104: 1 H0677: 8, L0617: 4, H0650: 3, H0457: 3, T0041: 3, H0657: 2, H0486: 2, | 237-257, 130-146, 71-87, 48-64 |

754	HCE3E13	869962	764	299 - 688	2169	H0581: 2, H0264: 2, H0652: 2, S0144: 2, S0002: 2, H0529: 2, L0662: 2, S0436: 2, H0713: 1, S0114: 1, H0254: 1, S0354: 1, S0360: 1, H0580: 1, H0485: 1, H0046: 1, H0594: 1, S6028: 1, H0271: 1, H0416: 1, H0388: 1, H0591: 1, S0440: 1, S0344: 1, S0426: 1, L0761: 1, L0766: 1, L0804: 1, L0655: 1, L0666: 1, L0664: 1, H0698: 1, H0435: 1, S0328: 1, H0539: 1, H0445: 1, S0434: 1, H0542: 1 and H0423: 1.	AR052: 18, AR053: 18, AR055: 14, AR096: 14, AR089: 11, AR104: 9, AR060: 9, AR033: 8, AR039: 7, AR061: 7 H0318: 1, H0052: 1, H0264: 1, S0386: 1 and H0521: 1.	101-117
755	HRAAH37	869969	765	40 - 489	2170	Met-1 to Asn-8, Ala-16 to Glu-45, Ser-57 to Val-62, Pro-101 to Cys-113.	AR039: 9, AR033: 7, AR053: 7, AR052: 7, AR055: 6, AR089: 6, AR096: 6, AR104: 5, AR060: 4, AR061: 4	76-93, 126-142

756	HTOFB26	869981	766	77 - 649	2171	Ala-7 to Lys-12, Gln-49 to Asn-56.	H0650: 1, H0318: 1, H0264: 1, H0555: 1 and H0677: 1.	AR096: 7, AR060: 6, AR055: 5, AR089: 5, AR039: 5, AR033: 5, AR053: 4, AR052: 4, AR104: 3, AR061: 3 H0264: 1 and L0584: 1.	167-183, 141-157, 13-29
757	HMELR15	870005	767	262 - 2034	2172	Ser-14 to Arg-19, His-76 to Ser-82, Arg-229 to Leu-235, Asp-283 to Gly-289, Leu-301 to Ser-306, Ala-423 to Gln-429, Gly-444 to Thr-459, Ala-490 to Asp-499, Glu-502 to Gly-514, Ser-527 to Tyr-533, Glu-535 to Leu-545, Leu-578 to Arg-584.		AR055: 6, AR052: 4, AR053: 4, AR060: 4, AR033: 3, AR061: 3, AR089: 3, AR104: 3, AR039: 2, AR096: 2 H0046: 16, L0731: 5, L0758: 5, H0013: 4, S0436: 4, L0596: 4, L0766: 3, H0519: 3, H0521: 3, L0759: 3, H0543: 3, S0116: 2, S0222: 2, S0010: 2, H0266: 2, H0616: 2, H0412: 2, H0623: 2, L0655: 2, L0783: 2, H0547: 2, L0743: 2, L0747: 2, L0591: 2, L0362: 2, T0002: 1, S0114: 1, S0218: 1, H0341: 1, S0212: 1, H0663: 1, L0481: 1, S0354: 1, S0410: 1, H0722: 1, S0046: 1, S0132: 1,	211-227, 126-142, 347-363, 462-478, 29-45, 105-121, 237-253, 307-323, 147-163

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758	HTDAF92	870067	768	256 - 1011	2173		178-194
					Leu-23 to Val-28, Gly-94 to Asn-105, Asp-132 to Arg-140, Ser-154 to Asn-164,	S0476: 1, H0393: 1, L0717: 1, H0369: 1, H0392: 1, H0587: 1, T0039: 1, T0040: 1, H0156: 1, H0318: 1, H0230: 1, H0544: 1, H0545: 1, L0041: 1, H0014: 1, H0267: 1, H0252: 1, H0688: 1, H0644: 1, H0606: 1, H0135: 1, H0591: 1, H0038: 1, H0087: 1, H0488: 1, H0413: 1, S0038: 1, T0041: 1, H0561: 1, S0440: 1, H0695: 1, L0369: 1, L0763: 1, L0638: 1, L0764: 1, L0662: 1, L0651: 1, L0806: 1, L0657: 1, L0518: 1, L0809: 1, H0144: 1, H0520: 1, S0126: 1, H0435: 1, H0660: 1, S0013: 1, H0627: 1, S3012: 1, S0027: 1, L0741: 1, L0744: 1, L0748: 1, L0786: 1, L0779: 1, S0031: 1, S0260: 1, L0599: 1, L0608: 1, L0595: 1, S0011: 1, S0242: 1, H0423: 1 and H0422: 1. AR060: 3, AR089: 2, AR033: 2, AR039: 2, AR053: 1, AR055: 1, AR061: 1, AR104: 1.	

						His-196 to Pro-203, Arg-227 to Ala-232.	AR052: 1, AR096: 1 L0439: 3, S0222: 2, H0543: 2, S0360: 1, H0622: 1, H0063: 1, H0477: 1, T0042: 1, L0369: 1, L0771: 1, L0662: 1, L0659: 1, L0809: 1 and L0786: 1.	
759	HTLIV78	870098	769	109 - 603	2174	Pro-9 to Asp-14, Arg-101 to Gln-113.	AR039: 25, AR104: 13, AR055: 12, AR096: 12, AR053: 12, AR033: 11, AR089: 9, AR060: 8, AR052: 8, AR061: 7 L0758: 10, L0794: 3, H0618: 2, H0038: 2, H0253: 1, L0768: 1 and L0789: 1.	67-86, 131-149, 49-66
760	HTLEI29	870142	770	106 - 1287	2175	Thr-92 to Phe-104, Pro-121 to Lys-127, Arg-178 to Gly-184, Ser-219 to Asp-224, Pro-237 to His-242, Ser-348 to Gly-353.	AR055: 17, AR039: 11, AR033: 10, AR053: 10, AR061: 8, AR089: 8, AR052: 7, AR060: 7, AR096: 6, AR104: 5 H0253: 15, H0618: 12, L0758: 11, L0779: 10, H0150: 1, L0768: 1 and L0790: 1.	269-288, 364-380
761	HTLGX79	870181	771	121 - 543	2176	Arg-3 to Ser-9, Gly-15 to Arg-40.	AR055: 7, AR039: 5, AR052: 5, AR053: 5, AR104: 4, AR061: 4, AR096: 5, AR060: 4, AR089: 3	57-74

| 762 | HHFOV07 | 870237 | 772 | 28 - 975 | 2177 | Pro-116 to Ser-127, Glu-130 to Leu-135. | L0803: 15, L0794: 8, L0731: 7, L0758: 7, H0253: 6, H0618: 4, L0804: 4, L0809: 4, L0439: 4, L0754: 4, S0442: 3, L0752: 3, H0556: 2, S0045: 2, T0010: 2, H0622: 2, H0553: 2, H0135: 2, L0770: 2, L0662: 2, L0775: 2, H0144: 2, L0741: 2, L0747: 2, H0171: 1, H0713: 1, S0218: 1, H0661: 1, S0046: 1, H0550: 1, S0222: 1, H0586: 1, H0333: 1, H0486: 1, S0010: 1, H0421: 1, H0194: 1, H0564: 1, H0687: 1, H0039: 1, H0616: 1, S0038: 1, H0100: 1, H0633: 1, L0763: 1, L0800: 1, L0642: 1, L0764: 1, L0768: 1, L0776: 1, L0656: 1, L0659: 1, L0382: 1, L0666: 1, H0593: 1, L0740: 1, L0755: 1, L0757: 1, S0434: 1, S0436: 1 and H0665: 1. | AR055: 6, AR060: 5, AR052: 4, AR053: 3, AR089: 2, AR033: 2, AR061: 2, AR096: 1, AR104: 1, AR039: 0 | 162-178, 95-111, 16-32 |

| 763 | HTLDO59 | 870276 | 773 | 40 - 459 | 2178 | Pro-10 to Gly-17, Gly-25 to Thr-37, Asp-39 to Gly-44, Arg-66 to His-71. | H0645: 1 and H0253: 1.

AR039: 64, AR053: 43, AR052: 34, AR104: 30, AR033: 29, AR089: 29, AR096: 29, AR055: 28, AR060: 19, AR061: 16 H0618: 5, L0758: 5, S0049: 4, H0253: 3, H0052: 3, H0617: 3, H0494: 3, H0144: 3, L0747: 3, H0341: 2, H0550: 2, H0424: 2, L0794: 2, L0766: 2, L0439: 2, L0751: 2, L0745: 2, L0752: 2, S0436: 2, S0452: 2, H0556: 1, S0114: 1, H0483: 1, S0358: 1, S0360: 1, H0580: 1, S0132: 1, H0261: 1, H0559: 1, H0486: 1, S0280: 1, H0575: 1, L0024: 1, H0546: 1, H0150: 1, H0620: 1, H0024: 1, T0010: 1, S6028: 1, H0179: 1, H0417: 1, H0038: 1, T0067: 1, H0059: 1, T0042: 1, S0144: 1, L0637: 1, L0761: 1, L0768: 1, L0807: 1, L0788: 1, L0791: 1, H0520: 1, H0593: 1, H0684: 1, S0380: 1, H0696: 1, H0555: 1, H0436: 1, L0748: | 78-98 |

764	HE8TM62	870447	774	8 - 346	2179		1, L0740: 1, L0754: 1, L0779: 1, L0755: 1, L0581: 1, L0698: 1 and S0424: 1. AR061: 4, AR055: 4, AR033: 3, AR052: 3, AR060: 3, AR053: 3, AR096: 3, AR089: 2, AR104: 1, AR039: 0 H0013: 1, H0014: 1, H0087: 1, L0742: 1, L0750: 1 and S0424: 1.	63-85, 26-44
765	HJBCS70	870457	775	734 - 186	2180	Met-1 to Cys-7, Gly-21 to Val-28, Lys-46 to Ala-56.	AR104: 124, AR061: 112, AR096: 76, AR055: 74, AR053: 64, AR033: 59, AR089: 59, AR060: 57, AR052: 52, AR039: 36 L0731: 3, H0086: 2, H0717: 1, S0212: 1, H0255: 1, S0045: 1, H0493: 1, H0559: 1, H0052: 1, H0620: 1, S6028: 1, T0042: 1, H0478: 1, L0749: 1, L0758: 1 and S0436: 1.	121-143
766	HTFMP59	870490	776	93 - 641	2181		AR060: 1, AR053: 1, AR052: 1, AR033: 1, AR055: 1, AR061: 1, AR089: 1, AR104: 0, AR096: 0, AR039: 0 H0402: 1, S0418: 1,	145-164, 91-108, 126-142

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767	HTEOY86	870519	777	366 - 722	2182	His-73 to His-78.	T0003: 1, H0418: 1, L0055: 1, L0378: 1, L0519: 1, L0744: 1, L0751: 1, L0749: 1, L0756: 1, L0752: 1, L0731: 1, L0758: 1, L0587: 1, L0601: 1 and S0424: 1. AR055: 11, AR052: 9, AR053: 8, AR060: 7, AR033: 6, AR061: 5, AR089: 5, AR096: 4, AR039: 3, AR104: 2 H0616: 5, H0619: 1, H0618: 1, H0038: 1, L0806: 1, L0666: 1, L0664: 1 and L0750: 1.	33-49, 79-95, 51-67
768	HTEKC55	870560	778	175 - 1164	2183	Ser-4 to Ser-14, Pro-73 to Gly-85, Lys-107 to Gly-115, Gly-201 to Trp-210, Lys-247 to Cys-258, Pro-260 to Cys-265, Thr-281 to Pro-290, Glu-303 to Phe-309.	AR053: 18, AR052: 15, AR055: 12, AR096: 11, AR089: 10, AR060: 9, AR033: 8, AR061: 6, AR104: 5, AR039: 4 H0038: 9, H0616: 2, H0618: 1, L0779: 1 and L0697: 1.	140-159, 167-186, 214-230
769	HTEPK69	870574	779	281 - 2092	2184	Met-1 to Ala-11, Pro-21 to Gln-31, Thr-39 to Glu-55, Leu-59 to Pro-64, Pro-73 to Leu-88, Glu-106 to Glu-116,	AR055: 7, AR060: 6, AR052: 5, AR089: 5, AR033: 4, AR053: 4, AR061: 4, AR096: 4, AR039: 3, AR104: 2 L0794: 6, L0803: 5,	585-601, 357-373, 254-270, 337-353

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770	HTENV57	870594	780	105 - 497	2185	Ser-2 to Arg-8, Arg-16 to Ser-22, Glu-33 to Asn-40, Lys-70 to Gln-80, Tyr-88 to Lys-94, Lys-110 to Gln-122.	AR055: 10, AR061: 5, AR053: 5, AR060: 5, AR089: 4, AR033: 4, AR052: 4, AR096: 3, AR039: 3, AR104: 2	L0378: 1, L0806: 1, L0607: 1, L0659: 1, L0783: 1, L0664: 1, H0547: 1, S3012: 1, L0747: 1, H0445: 1, L0592: 1, L0604: 1, L0595: 1, L0601: 1, H0543: 1, H0423: 1 and H0422: 1. H0616: 5 and H0038: 1.	44-64
771	HTEJF45	870668	781	135 - 500	2186	Ser-6 to Pro-13, His-15 to Thr-21, Ser-55 to Pro-66, Asn-94 to Ser-101.	AR039: 45, AR053: 33, AR052: 30, AR055: 27, AR096: 25, AR033: 23, AR089: 22, AR060: 21, AR104: 17, AR061: 14 H0618: 2, H0038: 2, L0807: 2, L0768: 1, L0794: 1 and L0758: 1.		101-117
772	HTEGF16	870701	782	299 - 817	2187	Gln-39 to Asp-51, Gln-102 to Leu-107, Pro-118 to Arg-131.	AR039: 39, AR052: 26, AR033: 25, AR053: 22, AR055: 22, AR096: 19, AR104: 19, AR060: 18, AR089: 18, AR061: 13 L0803: 8, H0318: 4, L0800: 4, L0764: 4, L0766: 4, L0372: 3, L0809: 3,		51-82, 150-166

| 773 | HLTGU35 | 870713 | 783 | 200 - 520 | 2188 | Met-1 to Tyr-11, Lys-13 to Phe-18, Cys-22 to Gly-27. | AR033: 2, AR096: 2, AR104: 2, AR055: 1, AR089: 1, AR061: 1, AR060: 1, AR052: 0, AR039: 0, AR053: 0 S0422: 2, L0439: 2, H0294: 1, S0134: 1, S0358: 1, S0360: 1, H0586: 1, H0570: 1, H0591: 1, S0142: 1, L0598: 1, L0763: 1, L0770: 1, S0374: 1 and L0589: 1. | L0750: 3, L0777: 3, H0575: 2, S0010: 2, H0038: 2, L0662: 2, L0794: 2, L0774: 2, L0805: 2, L0659: 2, S0328: 2, L0758: 2, L0591: 2, H0650: 1, H0484: 1, H0369: 1, H0438: 1, H0618: 1, H0390: 1, H0266: 1, H0644: 1, L0770: 1, L0769: 1, L0772: 1, L0643: 1, L0773: 1, L0648: 1, L0375: 1, L0806: 1, L0789: 1, L0663: 1, L0664: 1, L0438: 1, S0126: 1, S0330: 1, H0696: 1, L0748: 1, L0439: 1, L0740: 1, L0754: 1, L0749: 1 and L0779: 1. | 59-75, 29-45, 82-98 |

| 774 | HTEDK07 | 870714 | 784 | 21 - 515 | 2189 | Thr-94 to Trp-103, Arg-121 to Trp-140. | AR055: 16, AR039: 14, AR033: 11, AR060: 9, AR104: 9, AR053: 8, AR052: 8, AR096: 7, AR089: 7, AR061: 6 L0754: 3, L0777: 3, L0439: 2, S0116: 1, H0341: 1, H0661: 1, H0038: 1, H0412: 1, L0761: 1, L0667: 1, L0764: 1, L0788: 1, H0435: 1, L0749: 1, L0779: 1 and L0758: 1. | 57-75 |
| 775 | HADGO63 | 870818 | 785 | 1996 - 1418 | 2190 | Ser-33 to Arg-38, Glu-134 to Ser-140, Val-177 to Asn-182. | AR053: 4, AR096: 3, AR033: 3, AR104: 3, AR052: 3, AR039: 3, AR055: 3, AR089: 2, AR061: 1, AR060: 1 L0766: 8, L0438: 4, H0547: 4, L0756: 4, L0748: 3, L0777: 3, H0051: 2, L0754: 2, L0749: 2, L0759: 2, S0040: 1, S0342: 1, T0049: 1, H0638: 1, S0376: 1, S0045: 1, H0619: 1, L0717: 1, H0411: 1, S0220: 1, H0587: 1, H0574: 1, H0427: 1, H0599: 1, S0010: 1, S0346: 1, S0474: 1, H0544: 1, L0471: 1, H0039: 1, H0538: 1, L0770: 1, | 70-89, 101-117, 6-22, 52-68 |

| 776 | HTAHY24 | 870826 | 786 | 452 - 760 | 2191 | Met-1 to Thr-9, Pro-39 to Ala-48, Pro-51 to Ser-57, Thr-80 to Tyr-92. | AR055: 10, AR060: 6, AR033: 5, AR096: 4, AR061: 4, AR089: 4, AR053: 4, AR052: 4, AR039: 2, AR104: 2 H0635: 2, H0580: 1, H0634: 1, L0731: 1 and L0596: 1. L0761: 1, L0771: 1, L0662: 1, L0375: 1, L0805: 1, L0793: 1, L0666: 1, S0053: 1, L0352: 1, S0126: 1, H0435: 1, H0658: 1, H0539: 1, S0152: 1, L0740: 1, L0750: 1, L0755: 1, S0031: 1, L0591: 1 and H0668: 1. | 55-79 |
| 777 | HDPDO84 | 870936 | 787 | 55 - 567 | 2192 | Ser-35 to Thr-51, Gln-75 to Asp-81, Gly-123 to Asn-135. | AR033: 8, AR089: 6, AR039: 5, AR052: 4, AR053: 4, AR060: 4, AR055: 4, AR096: 3, AR061: 3, AR104: 2 L0755: 12, L0759: 6, L0745: 5, L0794: 4, S0418: 3, L0666: 3, H0520: 3, S0152: 3, L0748: 3, L0779: 3, S0212: 2, H0318: 2, H0031: 2, L0142: 2, H0538: 2, L0766: 2, L0659: 2, L0665: 2, H0519: 2, S0328: 2. | 145-171 |

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AR033: 6, AR052: 6, AR096: 4, AR089: 4, AR053: 3, AR039: 3, AR060: 3, AR104: 2, AR055: 2, AR061: 1 L0755: 12, L0759: 6,

L0745: 5, L0794: 4, S0418: 3, L0666: 3, H0520: 3, S0152: 3, L0748: 3, L0779: 3, S0212: 2, H0318: 2, H0031: 2, L0142: 2, H0538: 2, L0766: 2, L0659: 2, L0665: 2, H0519: 2, S0328: 2, L0754: 2, L0747: 2, L0777: 2, L0600: 2, L0470: 1, S0116: 1, S0045: 1, H0587: 1, H0333: 1, H0486: 1, H0581: 1, H0597: 1, L0157: 1, S6028: 1, H0266: 1, S0250: 1, S0022: 1, S0214: 1, T0023: 1, H0383: 1, H0674: 1, H0090: 1, H0038: 1, H0413: 1, H0494: 1, S0438: 1, H0509: 1, L0638: 1, L0637: 1, L0646: 1, L0800: 1, L0363: 1, L0768: 1, L0804: 1, L0774: 1, L0382: 1, L0789: 1, L0792: 1, L0664: 1, H0144: 1, H0547: 1, S0126: 1, S0380: 1, H0518: 1, H0521: 1, S0013: 1, H0704: 1, H0478: 1, S0032: 1, L0749: 1, L0756: 1, L0752: 1, L0731: 1, L0584: 1, L0588: 1, H0542: 1, H0543: 1,

| 779 | HTTBJ31 | 870946 | 789 | 463 - 783 | 2194 | Pro-17 to Arg-25, Ser-48 to Arg-67. | S0462: 1 and : 1. AR060: 75, AR104: 74, AR061: 72, AR033: 68, AR039: 57, AR055: 53, AR089: 41, AR052: 27, AR096: 20, AR053: 19 L0774: 6, H0046: 5, H0012: 3, H0333: 2, L0769: 2, H0662: 1, H0550: 1, H0370: 1, H0036: 1, T0003: 1, H0040: 1, L0768: 1, L0803: 1, L0659: 1, L0792: 1, L0666: 1 and H0008: 1. | 65-95 |
| 780 | HAMGO24 | 870957 | 790 | 136 - 549 | 2195 | Ser-12 to Leu-17, Lys-32 to Val-38. | AR052: 5, AR053: 4, AR096: 3, AR039: 3, AR089: 3, AR033: 2, AR060: 2, AR104: 2, AR061: 1, AR055: 1 L0766: 9, L0742: 6, L0803: 5, S0358: 3, H0521: 3, L0777: 3, L0758: 3, H0413: 2, S0466: 2, L0775: 2, L0666: 2, L0779: 2, L0752: 2, S0444: 1, S0360: 1, H0393: 1, H0587: 1, H0486: 1, H0013: 1, H0069: 1, H0575: 1, H0052: 1, H0545: 1, H0510: 1, H0687: 1, S0003: 1, H0553: 1, | 51-67, 72-88 |

781	HODFK55	870975	791	523 - 915	2196	Cys-12 to Tyr-23.	H0551: 1, H0560: 1, H0509: 1, H0646: 1, S0422: 1, L0598: 1, L0762: 1, L0641: 1, L0794: 1, L0804: 1, L0651: 1, L0659: 1, L0664: 1, H0519: 1, H0522: 1, L0755: 1, S0031: 1, H0653: 1, H0542: 1 and S0412: 1. AR096: 14, AR089: 11, AR055: 9, AR060: 9, AR033: 9, AR053: 7, AR052: 7, AR061: 5, AR104: 4, AR039: 4 H0580: 2, H0615: 2, H0619: 1, H0645: 1, H0549: 1, H0392: 1, H0581: 1, T0042: 1, L0766: 1, H0522: 1 and H0343: 1.	5p15.2	123000, 602568	97-113, 77-93
782	HBJMW49	871019	792	107 - 457	2197	Glu-34 to Lys-48.	AR033: 11, AR055: 11, AR060: 7, AR061: 5, AR089: 5, AR052: 4, AR096: 4, AR053: 4, AR039: 3, AR104: 2			2-28, 96-112
783	HSXDF62	871038	793	82 - 420	2198	Asp-37 to His-51.	AR089: 1, AR104: 1, AR033: 1, AR061: 0, AR055: 0, AR052: 0, AR053: 0, AR060: 0, AR096: 0			62-82, 97-113, 3-19

784	HSVCE22	871088	794	78 - 440	2199		H0586: 1 and S0036: 1. AR052: 14, AR089: 10, AR053: 10, AR096: 9, AR055: 9, AR033: 7, AR060: 7, AR039: 6, AR104: 4, AR061: 4 H0309: 1, L0768: 1, L0527: 1 and L0749: 1.	43-64, 98-114
785	HFKLC74	871186	795	2045 - 687	2200	Gly-15 to His-26, Pro-28 to Asn-35, Pro-81 to Asn-98, Pro-118 to Arg-125.	AR060: 1, AR053: 1, AR033: 1, AR061: 1, AR096: 1, AR089: 1, AR104: 1, AR039: 0, AR055: 0, AR052: 0 L0794: 5, L0743: 4, H0265: 3, S0418: 3, H0620: 3, H0040: 3, H0561: 3, L0662: 3, L0803: 3, L0809: 3, L0759: 3, H0592: 2, H0559: 2, H0253: 2, H0318: 2, H0086: 2, H0494: 2, L0771: 2, L0766: 2, L0659: 2, L0352: 2, H0659: 2, H0670: 2, H0555: 2, S3012: 2, S0027: 2, L0748: 2, L0750: 2, H0542: 2, H0556: 1, H0650: 1, H0341: 1, H0484: 1, H0402: 1, S0354: 1, S0360: 1, H0580: 1, H0586: 1, H0497: 1, H0333:	97-116, 128-145, 162-178, 236-252

786	HTLEV30	871212	796	189 - 506	2201		81-106, 57-79
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787	HSRAV54	871264	797	969 - 1280	2202	Met-1 to Lys-9, Ala-11 to Trp-22, Pro-82 to Glu-92.	1, H0286: 1, H0100: 1, H0509: 1, L0373: 1, L0643: 1, L0645: 1, L0657: 1, H0435: 1, H0696: 1, L0749: 1, L0780: 1, L0755: 1, H0543: 1, S0042: 1 and H0677: 1.	AR096: 32, AR089: 19, AR039: 19, AR052: 17, AR053: 16, AR060: 16, AR055: 14, AR033: 12, AR104: 11, AR061: 5 S0011: 3, H0306: 1, H0402: 1, L0004: 1, H0486: 1, H0050: 1, S0051: 1, H0494: 1 and S0002: 1.		
788	HTLID05	871356	798	157 - 1008	2203			AR033: 15, AR055: 7, AR060: 4, AR061: 3, AR089: 3, AR052: 3, AR053: 3, AR104: 2, AR096: 2 S0282: 2, L0769: 2, L0794: 2, L0665: 2, L0438: 2, H0618: 1, S0010: 1, S0049: 1, H0052: 1, H0194: 1, S0051: 1, T0041: 1, L0770: 1, L0639: 1, L0761: 1, L0659: 1, L0809: 1, L0666: 1, L0352: 1, L0612:		

| 789 | HDACG50 | 871387 | 799 | 180 - 551 | 2204 | 1, L0439: 1, L0779: 1 and L0366: 1. AR052: 5, AR089: 5, AR060: 4, AR053: 4, AR096: 3, AR033: 3, AR104: 2, AR039: 1, AR055: 1, AR061: 1 L0748: 10, L0752: 9, L0731: 8, S0380: 7, L0758: 7, L0747: 6, H0038: 4, L0766: 4, L0438: 4, L0749: 4, S0003: 3, L0638: 3, L0768: 3, L0754: 3, L0770: 2, L0769: 2, L0774: 2, L0659: 2, H0522: 2, L0439: 2, L0740: 2, L0750: 2, L0786: 2, L0757: 2, L0759: 2, L0595: 2, L0362: 2, L0601: 2, S0040: 1, H0656: 1, S0354: 1, S0358: 1, T0008: 1, H0580: 1, S0045: 1, H0612: 1, H0497: 1, L0586: 1, H0013: 1, H0250: 1, H0635: 1, H0004: 1, S0010: 1, L0105: 1, H0546: 1, H0457: 1, H0083: 1, S0022: 1, S0214: 1, L0483: 1, H0031: 1, H0032: 1, H0673: 1, H0090: 1, H0412: 1, L0351: 1, H0494: 1, | 87-103 |

| 790 | HWAGU6 2 | 871413 | 800 | 19 - 732 | 2205 | Pro-94 to Lys-100, Glu-142 to Gln-147. | H0633: 1, S0144: 1, S0344: 1, S0002: 1, L0369: 1, L0772: 1, L0646: 1, L0764: 1, L0662: 1, L0775: 1, L0653: 1, L0384: 1, L0383: 1, L0664: 1, H0144: 1, H0520: 1, S0126: 1, H0435: 1, S0152: 1, H0521: 1, H0696: 1, H0555: 1, S0028: 1, S0260: 1, S0436: 1, L0589: 1, S0242: 1, S0194: 1, H0423: 1, H0422: 1 and S0424: 1. AR096: 6, AR039: 6, AR052: 6, AR089: 5, AR033: 5, AR053: 4, AR060: 4, AR055: 3, AR061: 3, AR104: 3 S0356: 10, S0422: 3, L0766: 3, L0803: 3, S0330: 3, H0486: 2, L0743: 2, L0731: 2, H0170: 1, L0785: 1, S0116: 1, S0442: 1, S0354: 1, S0358: 1, S0410: 1, S0278: 1, H0642: 1, H0581: 1, H0596: 1, H0355: 1, S0003: 1, L0455: 1, H0090: 1, H0591: 1, S0142: 1, S0344: 1, S0426: 1, L0598: 1, L0794: 1, L0804: | 211-238, 68-93, 146-164, 178-197, 1-22, 29-45 |

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827	HBMWZ85	873653	837	476 - 778	2242	Thr-22 to Thr-33, Leu-92 to Thr-97.	S0027: 1, L0750: 1, L0601: 1, L0366: 1, S0424: 1 and H0506: 1. AR052: 114, AR053: 78, AR096: 69, AR055: 65, AR089: 48, AR039: 46, AR033: 46, AR104: 41, AR061: 38, AR060: 37 S0114: 4, S0010: 3, H0059: 3, H0171: 2, S0116: 2, S0046: 2, S0051: 2, S0126: 2, S0134: 1, S0218: 1, H0255: 1, S0045: 1, S6016: 1, S0222: 1, H0632: 1, H0013: 1, H0251: 1, H0263: 1, H0200: 1, H0628: 1, H0674: 1, H0135: 1, H0038: 1, H0087: 1, T0090: 1, S0150: 1, S0142: 1, S0044: 1, H0576: 1 and S0026: 1.			57-76, 2-18
828	HTTEL61	873679	838	239 - 622	2243	Gln-3 to Trp-10.	AR061: 50, AR033: 45, AR089: 41, AR060: 36, AR055: 35, AR096: 33, AR053: 32, AR052: 32, AR104: 17, AR039: 10			67-83
829	HHEKA25	873756	839	61 - 768	2244	Met-1 to Pro-7.	AR061: 11, AR089: 4, H0040: 2, H0087: 1 and L0750: 1.	17p11.2	100710,	122-155,

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830	HTLEH76	873788	840	354 - 881	2245	AR055: 5, AR060: 3, AR089: 3, AR061: 3, AR033: 3, AR052: 2, AR104: 1, AR096: 1, AR053: 0, AR039: 0 H0253: 7, H0618: 6, L0758: 2, L0603: 2, H0050: 1, H0014: 1 and L0769: 1.		119-135	
831	HHEVQ56	874064	841	325 - 645	2246	AR096: 4, AR033: 3, AR039: 3, AR053: 3, AR104: 3, AR052: 3, AR089: 2, AR061: 2, AR060: 2, AR055: 2 L0439: 5, L0777: 5, H0052: 4, L0803: 4, L0789: 4, L0666: 4, H0556: 3,	Ser-101 to Asn-106.	65-91, 15-36, 42-58	

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833	HPCRR53	874354	841				Val-21 to Leu-29, Pro-31 to Gly-36, Leu-64 to Gly-69, Gln-77 to Tyr-82, Glu-84 to Gly-92, Glu-107 to His-118.	AR053: 8, AR033: 7, AR060: 7, AR089: 7, AR052: 5, AR096: 5, AR061: 5, AR104: 4, H0437: 1, S0280: 1, T0110: 1, H0622: 1, L0745: 1, L0746: 1, L0731: 1 and L0596: 1.	54-77, 86-102
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834	HLQEW26	874356	844	226 - 561	2249		Thr-29 to His-47.	AR052: 25, AR089: 20, AR033: 17, AR060: 16, AR055: 15, AR053: 15, AR104: 14, AR039: 9, AR061: 8, AR096: 8, L0662: 5, L0777: 5, L0805: 4, L0779: 4, L0755: 4, S0380: 3, L0750: 3, L0598: 2, L0770: 2, L0769: 2, L0637: 2, L0771: 2, L0774: 2, L0659: 2, L0663: 2, L0438: 2, H0521: 2, S0404: 2, L0439: 2, L0754: 2, S0442: 1, S0358: 1, S0360: 1, S0408: 1, H0574:	

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837	HNGEZ52	874434	847	100 - 1254	2252		AR053: 54, AR052: 41 T0114: 2, H0644: 1, H0144: 1, H0521: 1 and L0750: 1.	AR055: 7, AR060: 3, AR053: 3, AR089: 3, AR052: 3, AR061: 2, AR033: 2, AR096: 2, AR039: 0, AR104: 0 S0049: 1, T0090: 1, S0052: 1 and L0779: 1.	238-254, 53-70, 199-215
838	H2LAY37	874446	848	363 - 1172	2253	Asp-30 to Gly-38, Ser-71 to Arg-77, Leu-85 to Gly-91, Asp-127 to Gly-135, Glu-171 to Gly-176, Pro-182 to Glu-187.	AR052: 38, AR039: 15, AR060: 15, AR053: 15, AR033: 12, AR104: 10, AR089: 10, AR096: 9, AR055: 6, AR061: 6 H0638: 74, H0641: 68, L0747: 28, S0358: 26, H0521: 24, L0748: 23, S0360: 18, S0408: 18, L0754: 18, H0659: 15, L0757: 14, L0731: 13, H0250: 12, H0494: 12, S0026: 12, S0444: 11, S0440: 11, L0749: 11, S0328: 10, S0206: 9, L0750: 9, S0132: 8, H0574: 8, S0144: 8, L0740: 8, S0007: 7, S0414: 7, S0142: 7,	51-67, 214-230, 232-248

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S0278: 2, H0549: 2, H0537: 2, H0333: 2, H0069: 2, T0110: 2, H0544: 2, H0150: 2, L0471: 2, H0060: 2, H0109: 2, H0266: 2, H0328: 2, H0615: 2, H0031: 2, H0553: 2, H0644: 2, H0032: 2, S0438: 2, H0633: 2, L0762: 2, L0372: 2, L0646: 2, L0764: 2, L0662: 2, L0806: 2, L0654: 2, L0776: 2, L0789: 2, L0663: 2, L0664: 2, L0665: 2, H0682: 2, H0670: 2, L0602: 2, H0696: 2, S0404: 2, H0627: 2, L0751: 2, L0745: 2, L0588: 2, L0591: 2, L0581: 2, L0595: 2, L0361: 2, H0543: 2, H0352: 2, H0170: 1, L0615: 1, H0265: 1, H0141: 1, H0159: 1, H0585: 1, S0342: 1, H0294: 1, S0114: 1, S0430: 1, H0656: 1, S0212: 1, H0671: 1, H0661: 1, H0305: 1, H0125: 1, S0418: 1, S0354: 1, H0675: 1, H0637: 1, H0722: 1, H0208: 1, S0476: 1, H0393: 1, H0411: 1, H0586: 1, H0587: 1, H0497: 1,

H0642: 1, H0643: 1, H0632: 1, T0040: 1, S0280: 1, H0599: 1, H0042: 1, H0120: 1, H0318: 1, H0581: 1, H0263: 1, H0121: 1, H0530: 1, H0045: 1, H0012: 1, H0350: 1, H0057: 1, H0015: 1, S0388: 1, S0051: 1, H0375: 1, H0061: 1, H0179: 1, S0022: 1, S0214: 1, L0483: 1, H0628: 1, H0617: 1, L0055: 1, H0165: 1, H0169: 1, H0674: 1, H0598: 1, H0591: 1, H0038: 1, H0040: 1, H0087: 1, H0551: 1, H0116: 1, H0272: 1, H0413: 1, L0351: 1, L0475: 1, S0448: 1, S0464: 1, S0306: 1, S0466: 1, H0130: 1, H0647: 1, H0646: 1, H0652: 1, S0344: 1, S0002: 1, L0598: 1, H0529: 1, L0520: 1, L0761: 1, L0667: 1, L0772: 1, L0645: 1, L0773: 1, L0521: 1, L0626: 1, L0794: 1, L0649: 1, L0522: 1, L0774: 1, L0653: 1, L0379: 1, L0657: 1, L0559: 1, L0526: 1, L0782: 1, L0382: 1, L0519: 1,

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842	HMCGZ52	874610	852	243-1187	2257	Pro-30 to Trp-38, Pro-100 to Lys-109, Tyr-129 to Ala-136, Val-144 to Lys-153, Pro-173 to Gly-178, Phe-193 to Asn-201,	AR055: 9, AR033: 8, AR052: 5, AR060: 5, AR096: 4, AR089: 4, AR061: 3, AR053: 3, AR104: 3, AR039: 2, L0779: 6, S0358: 4,		37-61, 12-28, 70-86, 238-254

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| | | | | | Gly-3 to His-9, Pro-88 to Lys-93, Arg-112 to Trp-117. | AR053: 2, AR096: 2, AR060: 2, AR061: 1, AR089: 0, AR052: 0, AR033: 0 S0356: 10, S0422: 3, L0766: 3, L0803: 3, S0330: 3, H0486: 2, L0743: 2, L0731: 2, H0170: 1, L0785: 1, S0116: 1, S0442: 1, S0354: 1, S0358: 1, S0410: 1, S0278: 1, H0642: 1, H0581: 1, H0596: 1, H0355: 1, S0003: 1, L0455: 1, H0090: 1, H0591: 1, S0142: | 50-84, 25-43, 120-136 |

| 844 | HLQHJ48 | 874643 | 854 | 32 - 751 | 2259 | Pro-2 to Gly-11, Gln-14 to Pro-19, Ala-92 to Asn-101, Gly-132 to Gly-137, Leu-145 to Pro-160, Asp-183 to Gly-191. | 1, S0344: 1, S0426: 1, L0598: 1, L0794: 1, L0804: 1, L0659: 1, L0809: 1, L0789: 1, L0664: 1, H0547: 1, H0660: 1, S0378: 1, L0751: 1, L0754: 1, L0779: 1, L0780: 1, L0758: 1, L0608: 1, S0026: 1 and H0543: 1. | 223-240 |
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865	HWLMC49	875704	875	176 - 490	2280	Ser-45 to Gly-51.	1, T0068: 1, H0547: 1, H0670: 1, H0672: 1, H0522: 1, H0436: 1, L0439: 1, L0786: 1, L0780: 1, H0542: 1, H0543: 1 and S0424: 1. AR033: 10, AR089: 7, AR053: 6, AR061: 6, AR096: 6, AR055: 5, AR039: 5, AR052: 5, AR060: 4, AR104: 2 L0748: 2, S0376: 1, H0611: 1, H0036: 1, H0318: 1, H0052: 1 and L0766: 1.	83-105, 26-42
866	HFCDF47	875724	876	279 - 1133	2281	Asn-84 to Ser-89.	AR053: 16, AR052: 13, AR089: 12, AR055: 12, AR033: 10, AR104: 9, AR039: 9, AR096: 9, AR060: 6, AR061: 6 S0356: 1 and H0009: 1.	59-77, 10-27, 91-107, 35-51
867	HCRNJ24	875794	877	71 - 721	2282	Tyr-16 to Arg-23.	AR052: 4, AR096: 4, AR053: 3, AR033: 3, AR089: 3, AR060: 2, AR055: 2, AR104: 1, AR061: 1, AR039: 1 L0766: 4, S0356: 3, H0083: 2, H0266: 2, H0031: 2, L0666: 2, L0731: 2, H0543: 2, H0395: 1, S0040: 1, S0444: 1, S0045: 1,	183-203, 104-124, 132-148

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868	HCRNT27	875817	878	50 - 556	2283	Ser-13 to Ile-22, Asn-54 to Lys-65, Ser-78 to Lys-93, Gly-146 to Pro-163.	H0587: 1, S0010: 1, H0581: 1, H0421: 1, H0687: 1, H0615: 1, H0622: 1, S0036: 1, S0386: 1, H0494: 1, S0210: 1, L0598: 1, L0794: 1, L0803: 1, L0775: 1, L0792: 1, L0663: 1, L0664: 1, H0520: 1, H0547: 1, S0380: 1, S3014: 1, L0748: 1, L0756: 1, L0755: 1, L0757: 1, L0759: 1, H0343: 1, H0668: 1 and S0026: 1. AR039: 7, AR104: 5, AR053: 5, AR052: 5, AR089: 4, AR096: 4, AR060: 3, AR033: 3, AR061: 1, AR055: 0 S0356: 2, L0747: 2, L0758: 2, H0341: 1, H0125: 1, H0581: 1, H0052: 1, S0003: 1, L0373: 1, L0662: 1, L0658: 1, H0547: 1, H0519: 1, L0777: 1 and L0604: 1.	127-143, 33-49
869	HCQCC37	875825	879	144 - 497	2284	Glu-19 to Gln-26, Asn-28 to Asn-33, Met-65 to Asn-71, Val-75 to Thr-87.	AR055: 8, AR053: 4, AR089: 4, AR052: 4, AR061: 4, AR060: 4, AR096: 4, AR033: 3, AR104: 1, AR039: 0	86-102

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870	HFXKZA4	875911	880	13 - 528	2285	Ser-67 to Tyr-93, Thr-109 to Arg-116.	AR104: 15, AR061: 14, AR055: 13, AR033: 11, AR052: 11, AR089: 11, AR060: 10, AR096: 7, AR053: 7, AR039: 5 L0731: 5, L0758: 5, H0620: 3, L0766: 3, S0360: 2, S0002: 2, L0809: 2, L0791: 2, L0748: 2, L0439: 2, L0747: 2, L0601: 2, H0556: 1, S0282: 1, H0125: 1, S0408: 1, H0549: 1, H0550: 1, S0222: 1, H0438: 1, H0592: 1, T0114: 1, H0581: 1, H0596: 1, S6028: 1, H0622: 1, H0135: 1, H0087: 1, H0059: 1, H0529: 1, L0769: 1, L0761: 1, L0372: 1, L0646: 1, L0804: 1, L0774: 1, L0776: 1, L0783: 1, L0543: 1, H0670: 1, H0555: 1, S3012: 1, L0757: 1, S0260: 1, L0596: 1 and L0361: 1.	H0586: 1, H0596: 1, S0250: 1, S0152: 1, H0521: 1 and L0758: 1.	1-24, 37-60
871	HWAAD1 5	875938	881	79 - 507	2286		AR039: 17, AR055: 13, AR033: 10, AR060: 10,		66-97, 101-131,

872	HDABX38	875997	882	172 - 975	2287	Glu-27 to Ser-34, Arg-106 to Asn-122, Arg-154 to Lys-163, Arg-214 to Tyr-225.	AR089: 10, AR104: 9, AR096: 9, AR052: 9, AR053: 8, AR061: 8 H0581: 2, L0766: 2, L0755: 2, S0360: 1, L0055: 1, L0598: 1, L0770: 1, L0772: 1, L0779: 1 and L0752: 1.	129-151, 185-201
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873	HETJZ14	876053	883	2790 - 1531	2288	Tyr-57 to Gly-66, Asp-91 to Lys-101, Val-131 to Gly-137, Asn-146 to His-152, Phe-200 to Arg-209, Leu-217 to Cys-222, Pro-326 to Asn-332, Lys-360 to Phe-375, Val-397 to Ile-405.	AR039: 17, AR053: 16, AR033: 12, AR052: 12, AR104: 12, AR096: 11, AR060: 10, AR055: 10, AR089: 9, AR061: 4 S0354: 1, H0497: 1, H0263: 1, H0551: 1, L0475: 1, H0547: 1, H0521: 1 and H0631: 1. AR055: 6, AR061: 6, AR033: 5, AR060: 4, AR052: 4, AR053: 3, AR089: 3, AR096: 3, AR104: 3, AR039: 2 L0766: 14, H0423: 9, L0659: 8, H0170: 6, H0657: 6, H0624: 4, S0420: 4, H0486: 4, H0013: 4, L0794: 4, L0666: 4, S0328: 4, H0521: 4, L0754: 4, L0731: 4, S0418: 3, S0356: 3,	303-322, 229-245, 154-170, 248-264

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| 874 | HFCFB73 | 876111 | 884 | 217 - 1341 | 2289 | Ala-17 to Asp-23, Pro-45 to Thr-53, Pro-55 to Glu-63, Trp-103 to Pro-117, Glu-198 to Tyr-209, Arg-257 to Thr-266, Pro-322 to Gly-328. | AR033: 45, AR104: 33, AR089: 30, AR096: 25, AR060: 21, AR055: 17, AR053: 15, AR052: 14, AR061: 9, AR039: 8 H0046: 14, L0517: 10, L0809: 7, L0731: 6, L0759: 6, L0748: 5, L0749: 5, S0360: 4, H0009: 4, H0616: 4, L0758: 4, H0556: 3, H0428: 3, H0494: 3, L0774: 3, H0684: 3, H0478: 3, L0777: 3, H0624: 2, H0265: 2, S0116: 2, H0484: 2, S0408: 2, S0278: 2, L0471: 2, H0024: 2, H0266: 2, H0622: 2, L0662: 2, L0497: 2, L0805: 2, L0493: 2, | L0805: 1, L0655: 1, L0656: 1, L0647: 1, L0367: 1, L0663: 1, L0664: 1, L0665: 1, H0144: 1, H0547: 1, H0519: 1, H0690: 1, H0435: 1, H0659: 1, H0660: 1, H0648: 1, H0518: 1, S0152: 1, H0555: 1, H0436: 1, L0747: 1, L0749: 1, L0780: 1, H0668: 1, S0242: 1, S0276: 1, H0543: 1, S0424: 1 and S0452: 1. | 233-256, 136-160, 166-192, 337-355, 302-318, 211-227, 270-286 |

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875	H2LAJ32	876142	885	208 - 561	2290		H0648: 1, S0013: 1, H0696: 1, S0044: 1, S0190: 1, H0555: 1, H0631: 1, S3012: 1, S0027: 1, L0744: 1, L0750: 1, L0779: 1, L0752: 1, S0434: 1, S0436: 1, L0588: 1, L0591: 1, L0592: 1, L0593: 1, L0361: 1, L0601: 1, H0665: 1 and S0456: 1.	34-65
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876	HTPIQ89	876198	886	219 - 575	2291	Met-1 to Thr-12.	AR055: 12, AR089: 7, AR033: 7, AR060: 6, AR052: 6, AR061: 6, AR053: 4, AR104: 4, AR039: 4, AR096: 2 H0039: 1, H0622: 1, L0764: 1, L0659: 1, L0809: 1, S0406: 1 and H0506: 1.	76-95, 46-64
877	HTDAI12	876209	887	298 - 870	2292	Gly-100 to Arg-106, Ser-111 to Cys-116.	AR089: 6, AR096: 6, AR033: 4, AR052: 4, AR053: 3, AR060: 3, AR039: 2, AR104: 2,	129-156

No.	Clone	ID	Range	SEQ ID	Mutation	Contact data	Positions
878	HWLGV14	876226	169 - 978	2293	Arg-16 to Thr-21.	AR055: 2, AR061: 1 S0360: 3, S0354: 2, H0637: 2, S0298: 1, H0427: 1, H0477: 1 and H0445: 1.	198-229, 63-92, 126-151, 97-115
879	HCQBI31	876372	58 - 408	2294	Lys-11 to Glu-16.	AR061: 45, AR060: 10, AR096: 4, AR039: 4, AR089: 3, AR033: 3, AR055: 2, AR052: 2, AR104: 1, AR053: 0 S0354: 1 and L0748: 1. AR039: 19, AR053: 16, AR055: 15, AR033: 14, AR089: 13, AR096: 11, AR060: 11, AR052: 11, AR104: 10, AR061: 7 L0794: 4, H0263: 1, H0327: 1, L0763: 1, L0666: 1, L0663: 1, L0438: 1, S0378: 1, L0747: 1 and L0759: 1.	71-87, 18-34, 93-109
880	HE9RM22	876418	322 - 660	2295		AR061: 3, AR055: 3, AR060: 2, AR033: 2, AR104: 2, AR096: 1, AR053: 1, AR089: 1, AR052: 0, AR039: 0 L0748: 5, L0438: 3, S0360: 2, L0792: 2, L0439: 2, L0749: 2, L0759: 2, S0356: 1, H0333: 1, H0009:	41-66, 13-29

| 881 | HMUBP81 | 876452 | 891 | 1078 - 200 | 2296 | Met-1 to Arg-10, Val-22 to Ser-27, Asp-34 to Thr-39, Glu-115 to Arg-121, Leu-162 to Ser-169, Ile-266 to Ser-271. | 1, H0100: 1, L0803: 1, L0651: 1, L0776: 1, L0512: 1, H0144: 1 and L0352: 1. AR039: 34, AR033: 17, AR053: 15, AR104: 13, AR096: 13, AR089: 13, AR052: 11, AR055: 10, AR060: 10, AR061: 6 L0777: 10, L0769: 4, L0764: 3, L0740: 3, S0360: 2, T0042: 2, L0766: 2, L0775: 2, L0748: 2, L0779: 2, L0603: 2, H0650: 1, H0341: 1, S0358: 1, S0376: 1, L0021: 1, H0263: 1, H0046: 1, H0412: 1, H0529: 1, L0662: 1, L0767: 1, L0774: 1, L0776: 1, L0665: 1, H0648: 1, S0330: 1, L0755: 1, L0759: 1 and H0667: 1. | 225-252, 50-66 |
| 882 | HFIUG54 | 876475 | 892 | 681 - 980 | 2297 | | AR039: 11, AR104: 8, AR096: 6, AR053: 5, AR055: 5, AR052: 4, AR089: 4, AR033: 3, AR060: 3, AR061: 2 L0803: 8, L0756: 4, L0659: 3, L0731: 3, S0418: 2, H0156: 2, H0551: 2, | 64-84, 18-37 |

| 883 | HOBAE30 | 876533 | 893 | 388 - 699 | 2298 | Lys-25 to Lys-31, His-36 to Gln-42, Gln-84 to Cys-90. | L0369: 2, L0662: 2, L0766: 2, L0517: 2, L0665: 2, H0670: 2, S0380: 2, H0521: 2, L0740: 2, S0356: 1, S0376: 1, S0444: 1, S0360: 1, S0408: 1, H0329: 1, L0717: 1, H0497: 1, L0021: 1, H0004: 1, H0052: 1, H0044: 1, H0687: 1, T0006: 1, H0553: 1, H0674: 1, H0413: 1, H0633: 1, L0763: 1, L0770: 1, L0638: 1, L0667: 1, L0772: 1, L0764: 1, L0773: 1, L0794: 1, L0804: 1, L0774: 1, L0775: 1, L0653: 1, L0527: 1, L0518: 1, L0809: 1, L0438: 1, S0330: 1, H0696: 1, L0744: 1, L0748: 1, L0779: 1, L0777: 1, L0752: 1, L0757: 1, H0343: 1, S0434: 1, L0590: 1, S0011: 1, H0667: 1, S0194: 1, S0196: 1 and H0423: 1. AR096: 2, AR089: 1, AR053: 1, AR033: 1, AR060: 1, AR061: 1, AR039: 0, AR055: 0 L0754: 8, L0803: 6, L0748: 4, L0766: 3, S0376: | 62-85, 1-23 |

| 884 | HDABK73 | 876546 | 894 | 508 - 2508 | 2299 | Glu-6 to Thr-20, Glu-63 to Met-74, Gln-79 to Thr-87, Ser-90 to Glu-105, Pro-113 to Gln-136, Phe-232 to Lys-249. | 2, S0444: 2, S0360: 2, H0529: 2, L0663: 2, H0445: 2, L0603: 2, H0543: 2, H0657: 1, H0638: 1, S0420: 1, H0580: 1, H0393: 1, S0300: 1, L0717: 1, H0431: 1, H0643: 1, H0156: 1, H0581: 1, H0251: 1, H0014: 1, S0051: 1, S0003: 1, H0644: 1, H0090: 1, H0040: 1, S0472: 1, S0426: 1, L0598: 1, L0800: 1, L0641: 1, L0771: 1, L0521: 1, L0662: 1, L0768: 1, L0775: 1, L0805: 1, L0606: 1, L0657: 1, L0789: 1, L0665: 1, H0547: 1, H0519: 1, S0122: 1, H0658: 1, H0672: 1, H0539: 1, S0378: 1, H0521: 1, L0439: 1, L0752: 1, L0759: 1 and H0423: 1. AR053: 12, AR052: 9, AR096: 8, AR089: 5, AR039: 4, AR055: 4, AR033: 3, AR060: 3, AR061: 3, AR104: 2 H0497: 1, H0263: 1 and L0601: 1. | 144-161, 182-198 |
| 885 | HEMHA04 | 876674 | 895 | 529 - | 2300 | Pro-4 to Ser-9. | AR033: 9, AR052: 8, | 81-97, 11- |

886	HHEOX44	876676	896	151 - 2649	2301			27
846					Met-1 to Gln-8, Val-18 to Lys-36, Glu-42 to Thr-49, Pro-51 to Asn-58.	AR096: 8, AR089: 7, AR060: 7, AR104: 7, AR055: 6, AR039: 6, AR053: 5, AR061: 4 L0777: 9, L0748: 8, L0770: 5, L0789: 2, L0747: 2, L0755: 2, L0758: 2, H0171: 1, H0650: 1, S0376: 1, H0580: 1, S0046: 1, H0411: 1, H0549: 1, H0587: 1, H0486: 1, H0013: 1, H0318: 1, H0581: 1, L0471: 1, T0006: 1, H0031: 1, H0135: 1, H0040: 1, H0560: 1, H0561: 1, H0529: 1, L0769: 1, L0662: 1, L0803: 1, L0774: 1, H0670: 1, S0037: 1, S0027: 1, L0439: 1, L0740: 1, L0750: 1, L0759: 1, S0026: 1, S0276: 1 and H0543: 1.	AR104: 7, AR039: 6, AR096: 6, AR033: 5, AR052: 5, AR060: 4, AR089: 4, AR061: 3, AR053: 3, AR055: 2 L0779: 6, L0794: 5, L0439: 4, L0777: 4, L0758: 4, H0051: 2, H0040: 2, L0803: 2, L0775: 2, L0659:	727-748, 695-715, 222-240, 543-560, 676-692, 334-350, 521-537, 417-433, 655-671,

887	HWBBS84	876726	897	242 - 814	2302		
					Tyr-14 to Gly-19, Lys-26 to Tyr-31, Asp-36 to Asp-41, Leu-68 to Glu-73, Pro-161 to Gly-168.	2, L0663: 2, L0759: 2, L0608: 2, H0543: 2, H0556: 1, S0218: 1, H0657: 1, H0341: 1, S0444: 1, S0468: 1, H0013: 1, H0635: 1, H0599: 1, H0098: 1, H0318: 1, H0235: 1, T0110: 1, H0563: 1, H0292: 1, H0606: 1, H0056: 1, H0623: 1, S0440: 1, S0002: 1, L0644: 1, L0764: 1, L0773: 1, L0521: 1, L0662: 1, L0768: 1, L0766: 1, L0805: 1, L0528: 1, L0790: 1, L0792: 1, L0666: 1, L0664: 1, L0665: 1, L0438: 1, H0547: 1, S0126: 1, H0659: 1, H0670: 1, H0672: 1, H0521: 1, L0740: 1, L0747: 1, L0752: 1, L0596: 1, L0485: 1, L0595: 1, H0136: 1, H0542: 1 and H0423: 1.	AR039: 17, AR104: 11, AR096: 11, AR089: 10, AR033: 8, AR053: 8, AR060: 7, AR052: 5, AR055: 5, AR061: 3, H0039: 3, H0580: 2, H0263: 2, S0430: 1, S0358: 1, H0250: 1, T0103: 1,
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888	HWLIP86	876744	898	111 - 608	2303	Thr-91 to Ser-97, Thr-108 to Tyr-119, Gln-142 to Glu-157.	H0040: 1, H0494: 1, H0641: 1, L0662: 1, L0803: 1, S0428: 1, S0328: 1 and L0747: 1. AR039: 6, AR096: 3, AR060: 3, AR052: 3, AR053: 2, AR061: 2, AR104: 2, AR089: 1, AR055: 1, AR033: 1 L0775: 5, L0772: 3, S0358: 2, L0773: 2, S0356: 1, H0052: 1, H0596: 1, H0014: 1 and L0764: 1.	115-143, 72-91, 6-29
889	HSBAZ37	876799	899	1192 - 671	2304	Arg-45 to Gly-55, Asp-143 to Arg-150.	AR033: 37, AR053: 35, AR039: 33, AR055: 33, AR089: 32, AR052: 32, AR104: 30, AR061: 24, AR060: 20, AR096: 20	84-114, 113-142, 150-172, 55-74, 26-43, 77-93
890	HOSXA83	877015	900	802 - 395	2305		AR055: 8, AR060: 7, AR052: 7, AR096: 6, AR089: 6, AR053: 5, AR033: 5, AR039: 5, AR104: 5, AR061: 3 S0360: 3, L0758: 2, L0596: 2, L0485: 2, L0362: 2, S0011: 2, S0021: 2, H0656: 1, S0116: 1, S0418: 1, S0045: 1, S0476: 1,	111-133, 22-38

891	HDQHQ51	877101	901	584 - 1168	2306	Asp-3 to Cys-9, Gly-68 to Leu-74, Lys-109 to Asn-132.	H0393: 1, H0566: 1, H0050: 1, H0364: 1, H0040: 1, L0666: 1, H0547: 1, S0126: 1, H0539: 1, L0777: 1, L0752: 1, S0031: 1, S0436: 1, L0591: 1, L0601: 1, S0196: 1 and H0423: 1. AR055: 1, AR089: 1, AR060: 1, AR061: 0, AR096: 0, AR052: 0, AR104: 0, AR039: 0, AR033: 0, AR053: 0 H0521: 3, H0124: 2, H0494: 2, S0040: 1, S0430: 1, H0650: 1, H0656: 1, S0356: 1, S0358: 1, H0645: 1, H0586: 1, H0587: 1, H0590: 1, L0045: 1, H0316: 1, H0598: 1, S0036: 1, H0591: 1, H0641: 1, L0766: 1, H0701: 1, H0689: 1, H0672: 1, L0439: 1 and L0596: 1.	10-40, 75-104, 48-64, 135-151, 167-183
892	HWAAB46	877162	902	30 - 875	2307	Met-1 to Gly-8, Asn-38 to Leu-44, Arg-46 to Gly-51, Gln-120 to Pro-128, Met-168 to Pro-174.	AR096: 11, AR033: 11, AR104: 10, AR052: 9, AR053: 8, AR060: 8, AR089: 8, AR039: 6, AR055: 2, AR061: 2 L0766: 6, L0748: 5,	181-198, 142-158, 68-84, 206-222, 96-112

893	HOGDT09	877219	903	2422 - 854	2308		41-57, 152-168
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907	HFPHS77	878291	917	358 - 771	2322	Met-1 to Gln-6, Ile-32 to Cys-40, Trp-89 to Arg-97.	AR033: 10, AR055: 9, AR096: 7, AR089: 7, AR060: 7, AR104: 6, AR052: 5, AR053: 5, AR061: 5, AR039: 2 L0779: 4, H0671: 2, S0356: 2, S0222: 2, H0052: 2, L0754: 2, L0756: 2, T0002: 1, S0358: 1, H0574: 1, T0003: 1, S0051: 1, L0598: 1, L0794: 1, L0766: 1, L0803: 1, L0804: 1, L0775: 1, L0659: 1, L0789: 1, L0663: 1, H0144: 1, H0670: 1, H0651: 1, L0759: 1, L0362: 1 and S0026: 1.	L5623: 1, L0791: 1, L0793: 1, L0664: 1, H0689: 1, H0435: 1, S0406: 1 and L0592: 1.	39-63, 6-28
908	HBGQN46	878306	918	216 - 683	2323	Ala-15 to Tyr-20.	AR096: 1, AR033: 1, AR089: 1, AR060: 1, AR052: 0, AR061: 0, AR039: 0, AR053: 0, AR104: 0, AR055: 0 H0617: 2, L0794: 2, L0766: 2, L0806: 2, L0777: 2, H0587: 1, L0767: 1, L0375: 1, L0790: 1, L0792: 1		59-92

| 909 | HTAFG29 | 878308 | 919 | 1333 - 1707 | 2324 | Pro-100 to Lys-107. | 1, L0743: 1, L0779: 1 and L0780: 1. AR061: 2, AR039: 1, AR060: 1, AR089: 0, AR104: 0, AR055: 0 L0804: 5, L0794: 4, S0046: 3, L0769: 3, S0222: 2, H0604: 2, H0553: 2, L0654: 2, L0777: 2, L0780: 2, L0731: 2, L0599: 2, H0265: 1, H0556: 1, T0049: 1, S0444: 1, S0360: 1, L0717: 1, T0039: 1, H0013: 1, H0069: 1, H0635: 1, H0036: 1, H0085: 1, H0271: 1, H0188: 1, H0424: 1, H0628: 1, H0674: 1, H0551: 1, H0494: 1, L0373: 1, L0641: 1, L0764: 1, L0768: 1, L0523: 1, L0806: 1, L0790: 1, L0665: 1, S0374: 1, H0684: 1, H0555: 1, S0390: 1, L0748: 1, L0751: 1, L0747: 1, S0276: 1 and H0422: 1. | 70-87, 37-53 |
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| 911 | HMACZ08 | 878313 | 921 | 560 - 1174 | 2326 | Phe-16 to Asn-23, Arg-166 to Ser-183, Met-188 to Glu-193. | AR053: 115, AR052: 80, AR096: 71, AR039: 59, AR060: 41, AR089: 40, AR033: 37, AR104: 35, AR055: 29, AR061: 17 S0007: 10, L0748: 7, H0013: 3, S0010: 3, L0771: 3, L0438: 3, L0439: 3, L0591: 3, S0040: 2, S0222: 2, H0156: 2, H0083: 2, H0510: 2, S0003: 2, H0032: 2, L0519: 2, H0521: 2, S0260: 2, L0596: 2, S0276: 2, H0265: 1, H0556: 1, S0134: 1, H0675: 1, S0346: 1, H0196: 1, H0309: 1, | Xp22.1 | 300075, 300077, 301200, 302350, 306000, 306000, 306100, 307800, 309510, 311770, 312040, 312170, 312700, 313400 | 108-140, 36-58, 64-85, 145-161, 81-97 |
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912	HOHCA01	878348	922	169 - 1824	2327	Leu-2 to Leu-7, Leu-14 to Arg-46, Pro-73 to Arg-80, Ile-100 to Ile-105, Lys-113 to Val-126.	H0327: 1, H0530: 1, H0051: 1, H0266: 1, S0314: 1, S0022: 1, H0031: 1, H0553: 1, H0212: 1, H0038: 1, H0380: 1, H0264: 1, H0100: 1, H0509: 1, S0144: 1, L0763: 1, L0372: 1, L0374: 1, L0803: 1, L0775: 1, L0776: 1, S0216: 1, S0148: 1, H0670: 1, H0539: 1, H0518: 1, H0696: 1, S0146: 1, S0406: 1, S0028: 1, L0749: 1, L0779: 1, S0026: 1, S0192: 1 and S0242: 1. AR055: 2, AR060: 1, AR089: 1, AR061: 0, AR096: 0, AR033: 0, AR104: 0, AR053: 0, AR039: 0 H0124: 3, S0280: 2, S0212: 1, H0484: 1, S0356: 1, S0354: 1, H0370: 1, H0618: 1, H0046: 1, H0051: 1, S0250: 1, H0553: 1, H0087: 1, H0551: 1, H0560: 1, H0625: 1, H0561: 1, L0369: 1, H0519: 1, H0593: 1, L0740: 1, S0196: 1 and S0424: 1.	45-74, 395-413, 174-190, 336-352, 275-291, 466-482

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1, L0768: 1, L0649: 1,
L0652: 1, L0653: 1, L0809:
1, L0367: 1, L0663: 1,
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1, H0547: 1, H0670: 1,
H0660: 1, S0330: 1, S0378:
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| 922 | HDPFT14 | 878510 | 932 | 84 - 554 | 2337 | Gly-11 to Glu-16, Cys-52 to His-59, Val-67 to Gln-72. | AR039: 3, AR096: 3, AR052: 3, AR053: 3, AR104: 2, AR060: 2, AR089: 2, AR055: 2, AR033: 2, AR061: 1 H0521: 4, L0803: 3, L0439: 3, S0046: 2, H0488: 2, L0747: 2, L0758: 2, L0759: 2, H0556: 1, H0685: 1, H0657: 1, S0418: 1, S0360: 1, H0632: 1, H0486: 1, L0021: 1, H0618: 1, S0474: 1, H0421: 1, H0457: 1, H0014: 1, H0266: 1, H0622: 1, T0041: 1, H0561: 1, L0770: 1, L0761: 1, L0667: 1, L0372: 1, L0800: 1, L0662: 1, L0794: 1, L0804: 1, L0805: 1, L0789: 1, L0666: 1, H0520: 1, H0659: 1, H0672: 1, H0539: 1, L0740: 1, L0750: 1, L0779: 1, L0777: 1, L0752: 1, L0599: 1, L0603: 1, S0026: 1, H0543: 1 and H0422: 1. | 107-135, 73-94 |
| 923 | HNHFY67 | 878569 | 933 | 660 - 178 | 2338 | Arg-58 to Glu-64, Glu-72 to Lys-77, Glu-149 to Met-156. | AR053: 1, AR055: 1, AR089: 1, AR104: 1, AR033: 1, AR096: 1, AR061: 1, AR060: 0, H0422: 1. | 113-133, 19-35 |

924	HWLLR80	878628	934	52 - 1098	2339	Glu-27 to Gly-33, Pro-87 to Gly-94, Gly-110 to Leu-115, Asn-129 to Asp-134, Asn-148 to Glu-153, Ala-209 to Asp-215, Ser-241 to Ser-251.	AR052: 0 S0001: 7, S0028: 6, S0278: 2, H0575: 2, S0050: 2, H0271: 2, S0053: 2, S0031: 2, S0260: 2, L0593: 2, H0381: 1, H0419: 1, S0180: 1, S0282: 1, S0045: 1, L0476: 1, H0416: 1, H0313: 1, H0068: 1, S0036: 1, S0052: 1, S0428: 1, S0216: 1, S0146: 1, S0390: 1, L0592: 1 and L0603: 1.	283-306, 36-52
925	HLYAG35	878700	935	71 - 787	2340	Ala-24 to Asp-31.	AR096: 4, AR089: 3, AR055: 2, AR053: 2, AR060: 2, AR039: 2, AR033: 2, AR052: 2, AR061: 1, AR104: 1 S0358: 1, H0370: 1, H0253: 1, H0547: 1, H0521: 1, L0601: 1 and S0196: 1.	92-121, 188-206
926	HDPLU91	878742	936	106 - 930	2341	Pro-18 to Val-23, Pro-50 to Ser-60, Gln-97 to Gly-103.	AR039: 15, AR096: 8, AR060: 7, AR053: 6, AR089: 6, AR033: 6, AR052: 4, AR055: 3, AR104: 3, AR061: 2 H0046: 1 and H0445: 1. AR089: 13, AR053: 12, AR104: 9, AR052: 9, AR096: 7, AR033: 7,	30-52, 62-80, 206-222, 228-

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AR060: 5, AR061: 4
L0526: 6, L0439: 6,
L0666: 4, L0758: 4, L0638: 3, L0655: 3, H0672: 3,
L0740: 3, L0754: 3, H0657: 2, H0638: 2, S0418: 2,
L0005: 2, S0376: 2, H0083: 2, L0770: 2, L0769: 2,
L0761: 2, L0657: 2, L0659: 2, L0783: 2, L0519: 2,
L0663: 2, L0664: 2, L0438: 2, L0581: 2, L0608: 2,
H0423: 2, H0422: 2, S6024: 1, H0650: 1, H0664: 1,
L0481: 1, S0356: 1, H0611: 1, S0010: 1, H0581: 1,
H0251: 1, H0046: 1, H0050: 1, S0048: 1, H0266: 1,
H0188: 1, L0483: 1, H0591: 1, H0038: 1, H0040: 1,
H0616: 1, L0564: 1, H0022: 1, H0509: 1, H0130: 1,
S0422: 1, L0640: 1, L0771: 1, L0662: 1, L0768: 1,
L0766: 1, L0375: 1, L0776: 1, L0809: 1, L0528: 1,
L0792: 1, H0659: 1, H0670: 1, H0660: 1, H0648: 1,
S0380: 1, H0521: 1, H0696:

| 927 | HTFNS65 | 878748 | 937 | 190 - 750 | 2342 | Thr-15 to His-21, Gly-30 to Lys-39, Arg-113 to Met-118, Arg-178 to Ala-187. | 1, S0392: 1, L0742: 1, L0749: 1, L0756: 1, L0777: 1, L0731: 1, L0757: 1, L0759: 1, L0588: 1, L0589: 1, L0590: 1, L0592: 1, L0595: 1 and H0543: 1. AR053: 1, AR033: 1, AR089: 1, AR104: 1, AR060: 0, AR039: 0, AR061: 0, AR055: 0, AR052: 0, AR096: 0 L0777: 8, H0159: 3, S0408: 3, H0619: 3, L0770: 3, L0766: 3, L0783: 3, H0657: 2, H0617: 2, L0754: 2, L0747: 2, L0755: 2, L0731: 2, L0758: 2, H0265: 1, H0685: 1, S0134: 1, S0212: 1, H0663: 1, H0306: 1, H0402: 1, H0638: 1, S0444: 1, H0580: 1, S0046: 1, L0394: 1, H0431: 1, S0280: 1, H0052: 1, H0046: 1, H0081: 1, H0012: 1, S0036: 1, H0038: 1, H0412: 1, H0695: 1, L0769: 1, L0638: 1, L0764: 1, L0662: 1, L0774: 1, L0775: 1, L0375: 1, L0379: 1, L0438: 1, H0648: 1, S0028: 1, | 133-158 |

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928	HDABG90	878755	938	43 - 1284	2343	Tyr-4 to Gln-9, Asp-49 to Lys-54.	L0748: 1, L0751: 1, L0779: 1, L0752: 1, L0592: 1 and S0424: 1. AR096: 2, AR033: 1, AR053: 1, AR089: 1, AR052: 1, AR039: 1, AR061: 1, AR060: 1, AR055: 1, AR104: 0 H0616: 2, H0497: 1 and H0618: 1.	226-264, 106-132, 139-171, 313-343, 178-201, 286-302, 217-234
929	HDPQQ40	878790	939	106 - 726	2344	Pro-28 to Arg-35, Ser-51 to Pro-56, Pro-201 to Ser-207.	AR053: 3, AR052: 2, AR089: 2, AR096: 2, AR055: 2, AR033: 2, AR060: 2, AR061: 1, AR104: 1, AR039: 0 H0486: 3, L0766: 3, L0777: 3, S0002: 2, S0426: 2, L0743: 2, L0779: 2, L0759: 2, S0474: 1, H0673: 1, H0674: 1, H0477: 1, L0805: 1, L0659: 1, L0790: 1, H0522: 1, H0478: 1, H0445: 1 and H0543: 1.	157-173, 88-104, 13-29
930	HKAHL37	878823	940	12 - 698	2345	Gln-12 to Phe-25, Ala-82 to His-93, His-212 to Ala-217.	AR033: 5, AR061: 4, AR089: 3, AR052: 3, AR053: 2, AR055: 2, AR096: 2, AR060: 1, AR104: 1, AR039: 0 L0758: 12, H0617: 9,	21-46, 185-205, 50-74, 125-142, 106-122

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L0742: 4, L0751: 4, L0745:
4, H0305: 3, H0580: 3,
H0052: 3, L0157: 3, L0769:
3, L0768: 3, L0766: 3,
L0774: 3, L0783: 3, H0144:
3, S0436: 3, H0341: 2,
S0360: 2, H0550: 2, H0546:
2, H0424: 2, L0763: 2,
L0793: 2, L0748: 2, L0439:
2, L0740: 2, L0752: 2,
L0755: 2, L0757: 2, L0759:
2, L0581: 2, S0452: 2,
H0556: 1, S0114: 1, H0483:
1, H0661: 1, S0358: 1,
S0132: 1, S0476: 1, H0261:
1, S6016: 1, S0222: 1,
H0592: 1, H0586: 1, H0559:
1, H0486: 1, T0060: 1,
S0280: 1, H0575: 1, H0706:
1, L0024: 1, H0150: 1,
H0620: 1, H0024: 1, T0010:
1, S6028: 1, H0179: 1,
H0252: 1, H0417: 1, H0674:
1, H0708: 1, H0038: 1,
H0059: 1, T0042: 1, H0509:
1, H0641: 1, S0144: 1,
L0770: 1, L0637: 1, L0761:
1, L0363: 1, L0794: 1,

931	HBXAX11	878833	941	79 - 1239	2346	Met-1 to Tyr-11, Ser-190 to Thr-195, Pro-223 to Ser-229.	AR033: 4, AR096: 3, AR061: 2, AR052: 2, AR053: 2, AR089: 1, AR060: 1, AR055: 1, AR104: 1, AR039: 0 L0809: 7, L0769: 4, L0761: 4, L0751: 4, L5565: 2, L0764: 2, L0766: 2, L0665: 2, L0747: 2, L0605: 2, H0657: 1, H0188: 1, S0038: 1, H0625: 1, L0646: 1, L0643: 1, L0645: 1, L0648: 1, L0768: 1, L0794: 1, L0649: 1, L0651: 1, L0655: 1, L0659: 1, L0382: 1, L0647: 1, L0666: 1, H0547: 1, H0519: 1, L0779: 1, L0752: 1, L0731: 1, L0757: 1, L0758: 1 and L0587: 1.	L0775: 1, L0807: 1, L0383: 1, L0528: 1, L0788: 1, H0520: 1, H0593: 1, H0684: 1, S0380: 1, H0521: 1, H0522: 1, H0696: 1, S0406: 1, H0555: 1, H0436: 1, L0754: 1, L0750: 1, L0777: 1, L0588: 1, H0543: 1, L0698: 1 and S0424: 1.	125-143, 145-161, 70-86

| 932 | HMVBC71 | 878904 | 942 | 175 - 744 | 2347 | Pro-45 to Thr-52, Pro-57 to Gly-69, Pro-76 to Asn-86, Glu-92 to Gly-98, Asn-114 to Thr-121, Arg-147 to Arg-155, Pro-170 to Thr-181. | AR033: 6, AR104: 4, AR096: 4, AR089: 3, AR053: 2, AR060: 2, AR055: 2, AR052: 2, AR039: 2, AR061: 1 S0330: 3, S0046: 2, H0494: 2, L0065: 2, L0666: 2, H0670: 2, L0439: 2, H0624: 1, H0686: 1, H0295: 1, S0212: 1, S0442: 1, H0735: 1, H0549: 1, H0392: 1, H0559: 1, H0052: 1, H0597: 1, H0327: 1, H0009: 1, H0024: 1, S0050: 1, S0051: 1, H0428: 1, S0150: 1, H0641: 1, L0637: 1, L0662: 1, L0794: 1, L0649: 1, L0803: 1, L0774: 1, L0775: 1, L0651: 1, L0659: 1, L0526: 1, L0663: 1, L0665: 1, H0593: 1, H0690: 1, S0328: 1, H0696: 1, H0555: 1, S0037: 1, S0028: 1, L0756: 1, L0759: 1, S0434: 1 and S0276: 1. | | | 122-145, 2-34 |
| 933 | HHFML06 | 878912 | 943 | 140 - 559 | 2348 | Lys-36 to Lys-41, Val-133 to Asn-140. | AR055: 9, AR089: 6, AR052: 6, AR033: 6, AR060: 5, AR061: 5, AR096: 5, AR053: 4, AR104: 4, AR039: 1 | 14q24.3 | 104311, 109150, 182600, 245200, 601208 | 101-127, 3-20, 52-68, 80-96 |

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934	HEEAG84	878975	944	181 - 645	2349	Lys-13 to Thr-19.	AR096: 12, AR060: 10, AR055: 8, AR053: 8, AR104: 7, AR089: 7, AR052: 6, AR033: 5, AR039: 5, AR061: 4 H0549: 1 and H0538: 1.			33-51
935	HE8PT01	878979	945	1519 - 1929	2350	Met-113 to Arg-118.	AR039: 29, AR033: 19, AR104: 18, AR055: 18, AR053: 16, AR089: 13, AR052: 13, AR096: 13, AR060: 12, AR061: 12 L0747: 4, L0777: 4, S0222: 2, L0471: 2, L0455: 2, L0803: 2, L0790: 2, L0742: 2, L0748: 2, L0439: 2, L0753: 2, L0759: 2, L0717: 1, H0013: 1, H0575: 1, S0010: 1, H0350: 1, T0006: 1, L0770: 1, L0764: 1, L0794: 1, L0784: 1, L0806: 1, L0805: 1, S0052: 1, H0144: 1, L0438: 1, H0689: 1, L0749: 1, L0758: 1, H0445: 1 and L0599: 1.			91-109, 121-137
936	HMVCG79	879020	946	38 - 853	2351	Thr-28 to Arg-34, Leu-47 to Ser-53.	AR089: 6, AR060: 5, AR033: 4, AR104: 4, AR096: 3, AR039: 3, AR052: 3, AR053: 3,	6q14-q15	136550, 203310, 269920, 602772	141-165, 233-255, 3-25, 56-72, 166-

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							AR061: 2, AR055: 1 S0002: 4, S0206: 4, L0748: 2, L0740: 2, L0777: 2, S0212: 1, H0661: 1, S0278: 1, H0370: 1, H0123: 1, S0142: 1, L0800: 1, L0790: 1, H0539: 1, H0555: 1, S3014: 1, S0028: 1, L0754: 1 and L0759: 1.	183, 104-120, 199-215
937	HSLJF33	879040	947	18 - 521	2352	Glu-65 to Gly-71.	AR096: 2, AR039: 2, AR053: 1, AR052: 1, AR061: 1, AR089: 1, AR055: 0, AR033: 0, AR060: 0, AR104: 0 S0390: 1	97-126, 14-39, 43-63, 125-141
938	HFKJI43	879115	948	60 - 377	2353		AR033: 33, AR104: 32, AR055: 22, AR039: 20, AR053: 16, AR089: 16, AR096: 13, AR060: 13, AR052: 12, AR061: 8 L0747: 17, S0442: 15, L0665: 13, S0358: 11, S0444: 11, S0408: 10, S0374: 10, H0597: 7, H0620: 6, L0375: 6, L0518: 5, H0539: 5, L0750: 5, H0135: 4, L0764: 4, L0776: 4, H0144: 4, L0751: 4, H0352: 4, H0170: 3, S0376:	52-82

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L5565: 3, L0646: 3, L0766:
3, L0664: 3, H0660: 3,
S0404: 3, L0748: 3, L0439:
3, L0740: 3, L0752: 3,
S0418: 2, S0354: 2, S0300:
2, H0441: 2, H0599: 2,
H0009: 2, H0615: 2, S0036:
2, H0551: 2, T0041: 2,
L0372: 2, L0659: 2, L0517:
2, L0666: 2, L0663: 2,
H0547: 2, H0684: 2, H0696:
2, L0611: 2, L0742: 2,
L0731: 2, L0757: 2, H0445:
2, S0434: 2, H0542: 2,
H0543: 2, S0040: 1, S0430:
1, H0583: 1, L0416: 1,
H0341: 1, H0384: 1, H0662:
1, S0420: 1, H0675: 1,
H0619: 1, S0222: 1, S6014:
1, H0333: 1, S0280: 1,
S0346: 1, H0581: 1, H0194:
1, H0251: 1, H0085: 1,
H0263: 1, H0235: 1, H0327:
1, H0546: 1, H0565: 1,
H0563: 1, H0572: 1, L0471:
1, H0012: 1, H0024: 1,
T0010: 1, H0510: 1, H0099:
1, H0290: 1, H0252: 1,
H0428: 1, H0604: 1, H0213:

939	HFVHV40	879156	949	104 - 808	2354		
						1, H0553: 1, H0644: 1, H0321: 1, H0100: 1, L0351: 1, H0494: 1, H0560: 1, S0372: 1, S0440: 1, L0637: 1, L5575: 1, L0761: 1, L0643: 1, L0773: 1, L0648: 1, L0521: 1, L0768: 1, L0650: 1, L0774: 1, L0654: 1, L0636: 1, L0809: 1, L0647: 1, L0792: 1, H0702: 1, H0520: 1, H0519: 1, H0690: 1, H0435: 1, H0658: 1, H0670: 1, H0672: 1, S0174: 1, S0146: 1, S0406: 1, H0555: 1, S0027: 1, L0745: 1, L0779: 1, L0777: 1, L0753: 1, L0758: 1, L0759: 1, S0436: 1, L0601: 1, L0603: 1, S0106: 1, H0668: 1, S0026: 1 and S0412: 1.	AR033: 6, AR055: 6, AR053: 5, AR096: 5, AR052: 5, AR104: 4, AR061: 4, AR060: 4, AR039: 3, AR089: 3 L0758: 16, L0748: 10, H0620: 7, L0731: 6, H0246: 5, S0007: 4, H0253: 4, L0769: 4, L0754: 4, H0052:	74-91, 170-186, 1-17
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3, S3014: 3, L0439: 3,
H0265: 2, H0556: 2, T0002:
2, S6024: 2, H0656: 2,
H0341: 2, S0212: 2, S0376:
2, H0619: 2, H0261: 2,
S0222: 2, H0318: 2, H0012:
2, T0010: 2, H0068: 2,
H0551: 2, H0413: 2, H0494:
2, L0770: 2, L0768: 2,
L0650: 2, L0776: 2, S3012:
2, L0741: 2, L0749: 2,
L0750: 2, L0759: 2, L0608:
2, L0595: 2, H0352: 2,
S0040: 1, L0760: 1, S0116:
1, S0282: 1, H0638: 1,
S0418: 1, S0356: 1, H0393:
1, H0549: 1, H0550: 1,
H0592: 1, H0333: 1, H0486:
1, T0114: 1, H0250: 1,
H0069: 1, S0280: 1, H0156:
1, H0599: 1, H0575: 1,
H0036: 1, H0618: 1, H0597:
1, H0178: 1, N0006: 1,
H0563: 1, H0197: 1, H0199:
1, H0051: 1, H0083: 1,
H0060: 1, H0188: 1, H0290:
1, H0284: 1, H0428: 1,
H0622: 1, L0483: 1, H0124:

| 940 | HTXLR12 | 879160 | 950 | 714 - 2069 | 2355 | Tyr-48 to Asn-54. | 1, H0135: 1, H0163: 1, H0040: 1, H0264: 1, H0412: 1, L0564: 1, H0130: 1, H0641: 1, S0144: 1, S0002: 1, L0763: 1, L0761: 1, L0372: 1, L0643: 1, L0764: 1, L0771: 1, L0648: 1, L0767: 1, L0803: 1, L0804: 1, L0375: 1, L0378: 1, L0659: 1, L0544: 1, L0665: 1, H0703: 1, L0352: 1, H0670: 1, S0328: 1, S0330: 1, H0134: 1, H0436: 1, S0027: 1, L0747: 1, L0756: 1, L0777: 1, L0753: 1, S0260: 1, H0445: 1, L0597: 1, H0653: 1 and S0194: 1. | | 425-451, 415-431 |
| 941 | HDQEX68 | 879167 | 951 | 10 - 1470 | 2356 | Asp-4 to Glu-9, Ala-44 to Glu-62, | AR052: 4, AR055: 4, AR039: 3, AR060: 3, AR096: 3, AR033: 3, AR053: 2, AR089: 2, AR061: 2, AR104: 2, H0038: 2, H0265: 1, H0556: 1, S0134: 1, H0645: 1, S0222: 1, L0455: 1, S0328: 1, S0028: 1, L0591: 1 and S0194: 1. | 4   AR052: 9, AR033: 5, AR053: 5, AR096: 3, | 371-388, 295-311 |

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Leu-113 to Gln-120, Asp-131 to Glu-137, Lys-187 to Glu-194, Glu-315 to Arg-321, Gln-433 to Ser-439, Lys-446 to Pro-451, Lys-463 to Ser-470.	AR089: 3, AR060: 2, AR104: 2, AR061: 2, AR039: 2, AR055: 1 S0192: 11, L0731: 10, L0754: 8, L0439: 5, S0022: 4, H0551: 4, L0747: 4, H0046: 3, S0003: 3, H0031: 3, H0616: 3, L0771: 3, L0766: 3, L0666: 3, H0521: 3, L0759: 3, S0212: 2, H0575: 2, H0251: 2, H0596: 2, H0050: 2, L0471: 2, H0024: 2, H0328: 2, H0111: 2, L0803: 2, L0804: 2, L0659: 2, S0374: 2, L0438: 2, S0126: 2, S0028: 2, L0740: 2, S0040: 1, T0049: 1, H0650: 1, S0358: 1, H0580: 1, S0046: 1, H0640: 1, S0300: 1, H0574: 1, H0632: 1, H0270: 1, H0013: 1, H0156: 1, H0545: 1, H0051: 1, H0355: 1, H0510: 1, S0214: 1, H0615: 1, H0644: 1, L0055: 1, H0163: 1, H0090: 1, H0038: 1, H0059: 1, H0494: 1, H0509: 1, H0633: 1, S0344: 1, S0210: 1, S0002: 1, L0369: 1, L0646: 1, L0521: 1,	

No.	Clone				SEQ	Features	Distribution	Positions
942	HTPHG81	879182	952	198 - 1127	2357	Pro-9 to Glu-16, Ser-25 to Asp-31, Glu-55 to Glu-61, Met-87 to Gly-104, Cys-151 to Trp-157, Arg-222 to Gln-231, Val-275 to Pro-284.	L0662: 1, L0794: 1, L0774: 1, L0806: 1, L0805: 1, L0809: 1, L0367: 1, L0792: 1, L0663: 1, L0664: 1, H0144: 1, H0519: 1, H0670: 1, H0696: 1, S0406: 1, S0027: 1, L0751: 1, L0749: 1, L0750: 1, L0757: 1, L0480: 1, L0608: 1, S0011: 1, S0026: 1, S0242: 1, S0196: 1 and S0424: 1. AR039: 19, AR053: 13, AR096: 9, AR052: 9, AR055: 9, AR033: 9, AR089: 8, AR104: 7, AR060: 7, AR061: 6 H0553: 2, S0282: 1, S0049: 1, H0052: 1, H0622: 1, H0040: 1 and S0406: 1.	239-255, 114-130, 203-219
943	HETFJ66	879189	953	82 - 1503	2358	Pro-12 to Val-29, Glu-35 to Arg-40, Arg-46 to Ile-52, Tyr-88 to Ser-97, Gly-112 to Cys-117.	AR055: 5, AR052: 4, AR053: 3, AR061: 3, AR060: 3, AR033: 2, AR089: 2, AR096: 1, AR104: 0, AR039: 0 L0794: 24, H0046: 20, L0749: L0747: 5, L0748: 4, L0749: 4, H0013: 3, H0624: 2, H0553: 2, H0090: 2, L0761: 2, L0800: 2, L0767: 2,	195-211, 115-131

| 944 | HUVCM58 | 879222 | 954 | 116 - 1750 | 2359 | Arg-34 to Glu-41, Met-74 to Thr-80, Glu-124 to Lys-133, Pro-166 to Val-177, Arg-234 to Val-244, Ile-251 to Arg-259, Leu-261 to Leu-269, Gln-271 to Arg-284, Lys-399 to Pro-407, Ile-449 to Ser-458, Lys-464 to Gln-474. | AR089: 9, AR096: 8, AR033: 8, AR052: 7, AR053: 7, AR060: 5, AR061: 3, AR055: 3, AR104: 0 L0752: 8, L0766: 6, S0444: 5, L0770: 5, L0439: 5, L0731: 5, S0360: 3, H0031: 3, L0803: 3, S0126: 3, L0755: 3, L0758: 3, S0358: 2, H0722: 2, H0090: 2, H0056: 2, L0805: 2, L0659: 2, L0666: 2, L0665: 2, H0519: 2, S0330: 2, | L0805: 2, L0791: 2, L0666: 2, L0438: 2, L0754: 2, L0755: 2, H0171: 1, H0265: 1, H0657: 1, H0656: 1, H0663: 1, H0580: 1, H0645: 1, S6014: 1, H0050: 1, H0428: 1, T0006: 1, L0456: 1, H0591: 1, H0040: 1, H0087: 1, H0100: 1, T0042: 1, L5566: 1, L0764: 1, L0776: 1, L0792: 1, L4501: 1, H0144: 1, H0547: 1, S0406: 1, L0439: 1, L0740: 1, L0750: 1, L0756: 1, L0779: 1, L0777: 1, L0752: 1, L0759: 1 and L0600: 1. | 297-331, 138-166, 4-35, 404-431, 41-73, 360-385, 99-123, 494-516, 188-210, 339-355 |

H0521: 2, L0747: 2, H0170: 1, H0716: 1, H0740: 1, S0114: 1, S0212: 1, S0442: 1, S0354: 1, H0580: 1, H0329: 1, H0431: 1, H0497: 1, H0331: 1, H0574: 1, H0632: 1, H0486: 1, H0427: 1, L0021: 1, H0036: 1, H0274: 1, S0010: 1, H0318: 1, H0581: 1, H0374: 1, H0052: 1, H0596: 1, H0597: 1, H0545: 1, H0373: 1, S0388: 1, H0107: 1, S0003: 1, S0214: 1, H0428: 1, H0622: 1, H0553: 1, H0163: 1, H0087: 1, T0067: 1, H0494: 1, H0560: 1, S0438: 1, S0440: 1, S0426: 1, UNKWN: 1, L0598: 1, L0763: 1, L0769: 1, L0638: 1, L0761: 1, L0641: 1, L0776: 1, L0379: 1, L0657: 1, L0809: 1, L0519: 1, L0791: 1, L0663: 1, H0684: 1, H0672: 1, S0378: 1, H0522: 1, S0404: 1, S0406: 1, S0028: 1, L0750: 1, L0756: 1, L0753: 1, S0031: 1, H0445: 1, H0595: 1, S0436: 1, L0581: 1, L0608:

945	HDPGJ03	879294	955	475 - 32	2360	Asp-25 to Gln-32, Asn-40 to Lys-46, Trp-54 to Asn-62.	1, S0011: 1, S0026: 1, S0192: 1, S0196: 1, H0423: 1 and S0424: 1.	AR104: 2, AR096: 2, AR052: 1, AR039: 1, AR055: 1, AR033: 1, AR060: 1, AR061: 1, AR089: 0, AR053: 0 S0278: 5, S0144: 5, S0002: 4, H0521: 4, S0003: 3, S0344: 3, H0575: 1, H0364: 1, S0214: 1, H0068: 1, H0591: 1, L0806: 1, L0805: 1 and L0776: 1.	60-87
946	HUSIT07	879441	956	111 - 902	2361	Arg-24 to Arg-29, Arg-144 to Asn-151.		AR053: 10, AR033: 10, AR052: 9, AR089: 9, AR055: 8, AR060: 5, AR061: 4, AR039: 3, AR096: 2, AR104: 0 H0435: 3, S0476: 2, H0590: 2, L0758: 2, H0656: 1, H0484: 1, H0729: 1, S0046: 1, H0393: 1, H0632: 1, H0013: 1, S0474: 1, S0049: 1, H0074: 1, L0455: 1, H0598: 1, H0412: 1, L0648: 1, L0649: 1, L0527: 1, L0657: 1, L0659: 1, L0530: 1, H0539: 1, H0521: 1,	1-22, 172-195, 214-241, 89-122, 82-98, 150-166

947	HWHHN5 5	879514	957	114 - 1013	2362	Gly-14 to Lys-22.	1 and S0032: 1. AR039: 19, AR096: 9, AR104: 8, AR033: 8, AR053: 8, AR052: 7, AR089: 6, AR055: 5, AR060: 5, AR061: 4 S0348: 1, S0418: 1, H0592: 1 and H0586: 1.			215-231
948	HTTJH57	879541	958	15 - 839	2363	Pro-8 to Ser-14, Leu-16 to Gly-25, Gly-33 to Gly-38, Glu-43 to Glu-51.	AR052: 5, AR055: 5, AR060: 3, AR039: 3, AR061: 3, AR089: 2, AR033: 2, AR096: 2, AR053: 1, AR104: 1 H0052: 1, H0286: 1, H0634: 1 and L0771: 1.			238-255
949	HMSND53	879589	959	22 - 1947	2364	Lys-37 to Lys-47, Thr-87 to Lys-93, Gly-100 to Val-105, Gln-111 to Thr-128, Pro-155 to Asp-173, Gln-177 to Gln-184, Glu-202 to Leu-216, Asn-272 to Asp-277, Asp-289 to His-297, Gly-395 to Phe-402, His-435 to Ala-440, Asp-489 to Glu-498, Arg-581 to Gln-586, Thr-611 to Arg-616,	AR060: 2, AR096: 2, AR089: 2, AR033: 2, AR053: 2, AR061: 1, AR052: 1, AR055: 1, AR104: 1 L0439: 9, L0471: 3, H0591: 2, H0547: 2, H0624: 1, H0170: 1, S0430: 1, H0656: 1, S0110: 1, S0420: 1, S0376: 1, T0114: 1, H0427: 1, H0071: 1, H0275: 1, T0010: 1, S6028: 1, H0266: 1, H0428: 1, H0031: 1, H0090: 1, H0038: 1,			254-270, 357-373, 595-611, 541-557

| 950 | HMSNQ62 | 879610 | 960 | 149 - 1783 | 2365 | Glu-624 to Cys-636. | H0040: 1, H0551: 1, S0014: 1, H0646: 1, S0426: 1, H0529: 1, L0766: 1, H0520: 1, S0126: 1, H0689: 1, H0518: 1, L0754: 1, L0485: 1 and H0423: 1. | | 109-125, 523-539 |

AR055: 5, AR060: 4,
AR096: 4, AR039: 3,
AR053: 3, AR052: 3,
AR033: 3, AR061: 3,
AR089: 3, AR104: 2
H0457: 4, L0754: 4,
L0803: 3, L0439: 3, H0575:
2, H0617: 2, L0662: 2,
L0804: 2, L0805: 2, L0750:
2, L0731: 2, H0656: 1,
H0484: 1, H0255: 1, H0663:
1, L0717: 1, H0549: 1,
S0222: 1, H0602: 1, H0486:
1, H0013: 1, H0581: 1,
H0251: 1, H0046: 1, H0150:
1, H0428: 1, H0553: 1,
H0040: 1, H0063: 1, H0264:
1, H0623: 1, S0002: 1,
S0426: 1, L0762: 1, L0763:
1, L0769: 1, L0766: 1,
L0774: 1, L0787: 1, L0666:
1, L0663: 1, L0665: 1,
L0565: 1, H0689: 1, H0658:
1, H0670: 1, S0136: 1,

951	HGBHG78	879611	961	175 - 582	2366	Arg-63 to Thr-73, Pro-85 to Ser-92.	H0521: 1, L0748: 1, L0747: 1, L0752: 1 and H0423: 1.	22q13.31	250100, 250800, 250800	40-57, 22-38
952	HTLHJ08	879620	962	59 - 967	2367	His-204 to Pro-209.	AR055: 15, AR053: 11, AR052: 10, AR089: 8, AR033: 8, AR060: 8, AR096: 7, AR061: 6, AR104: 6, AR039: 4 H0014: 1 and L0752: 1.			70-98, 101-125, 169-190, 138-154
953	HSIDI48	879670	963	60 - 923	2368	His-102 to Gln-108, Asp-251 to Tyr-263, Gly-274 to Lys-288.	AR039: 44, AR055: 30, AR053: 22, AR033: 21, AR089: 19, AR060: 19, AR052: 18, AR096: 17, AR104: 16, AR061: 14 H0107: 2, L0758: 2, H0618: 1, H0154: 1, H0553: 1, H0038: 1 and H0616: 1. AR089: 17, AR052: 12, AR096: 9, AR039: 9, AR060: 8, AR104: 7, AR053: 6, AR033: 5, AR061: 5, AR055: 3 L0439: 17, L0777: 7, L0766: 6, L0740: 6, L0758: 5, L0483: 4, L0592: 4, H0178: 3, L0794: 3, S0358: 2, H0036: 2, H0039: 2, H0622: 2, H0644: 2, L0804: 2, L0775: 2, L0805: 2, L0438: 2, L0352: 2, H0670:			171-199, 78-97, 230-249, 33-50, 113-129, 215-231, 155-171, 15-31

954	HRDDU37	879672	964	15 - 611	2369		141-162
					Leu-21 to Lys-29, Gly-39 to Pro-51, Arg-68 to Lys-73, Val-91 to Pro-97, Glu-113 to Arg-120, Val-122 to Gly-131.	2, L0754: 2, L0785: 1, S0212: 1, H0664: 1, L0005: 1, S0356: 1, S0354: 1, H0329: 1, S0007: 1, S0046: 1, H0632: 1, H0486: 1, H0590: 1, S0010: 1, H0581: 1, S0049: 1, H0052: 1, L0471: 1, H0328: 1, T0023: 1, H0553: 1, H0181: 1, H0673: 1, H0674: 1, H0090: 1, H0059: 1, L0598: 1, L0769: 1, L0638: 1, L0761: 1, L0771: 1, L0803: 1, L0776: 1, L0659: 1, L0518: 1, L0783: 1, L0666: 1, L0665: 1, S0374: 1, H0520: 1, H0658: 1, S0328: 1, S0330: 1, S0152: 1, H0696: 1, S0404: 1, H0631: 1, S0028: 1, L0743: 1, L0750: 1, L0731: 1, H0444: 1, L0366: 1, S0026: 1, S0424: 1 and H0506: 1. AR033: 4, AR055: 3, AR061: 2, AR060: 2, AR096: 2, AR089: 2, AR052: 2, AR039: 1, AR053: 1, AR104: 0 L0439: 11, L0750: 5, L0766: 4, L0803: 4, H0519:	

955	HFLUI19	879691	965	1084 - 2682	2370		
					Glu-26 to Lys-33, His-45 to Asn-50, Asp-149 to Tyr-154, Asn-175 to Asp-181, Gly-268 to Gln-275, Leu-375 to Asp-383, Thr-441 to Gly-456,	4, L0752: 4, S0438: 3, H0521: 3, L0747: 3, H0265: 2, H0638: 2, H0046: 2, L0805: 2, L0791: 2, L0438: 2, L0743: 2, L0748: 2, L0780: 2, L0731: 2, H0716: 1, L0002: 1, H0341: 1, S0212: 1, H0305: 1, H0589: 1, S0444: 1, T0039: 1, H0427: 1, T0110: 1, H0545: 1, H0375: 1, H0124: 1, H0090: 1, H0616: 1, H0202: 1, T0041: 1, H0647: 1, S0344: 1, S0422: 1, H0529: 1, L0371: 1, L0764: 1, L0804: 1, L0659: 1, L0783: 1, L0809: 1, L0663: 1, S0126: 1, H0648: 1, H0672: 1, S0152: 1, S0028: 1, L0749: 1, L0779: 1, L0755: 1, L0758: 1, L0759: 1, S0434: 1, H0506: 1 and H0008: 1.	AR089: 1, AR033: 1, AR061: 1, AR060: 1, AR096: 0, AR052: 0, AR039: 0, AR055: 0 S0028: 8, S0282: 2, S0045: 2, S0031: 2, S0260: 2, S0001: 1, H0255: 1, S0132:	404-420, 286-302, 195-211

956	HTWAG66	879698	966	354 - 803	2371	Thr-499 to Arg-504.	1, S0278: 1, H0318: 1, H0199: 1, S0050: 1, S0051: 1, H0181: 1, S0036: 1, H0264: 1, S0144: 1, S0044: 1 and S0027: 1. AR055: 11, AR060: 9, AR061: 9, AR033: 7, AR052: 6, AR053: 6, AR096: 6, AR089: 5, AR104: 5, AR039: 4 H0306: 1, H0637: 1, H0187: 1 and S0106: 1.	76-98
957	HLCLE14	879732	967	14 - 424	2372	His-34 to Tyr-39, Pro-113 to Glu-119.	AR033: 7, AR055: 7, AR060: 5, AR096: 5, AR052: 5, AR104: 4, AR089: 4, AR053: 4, AR061: 4, AR039: 2 L0751: 16, H0617: 14, L0766: 13, L0731: 9, L0743: 8, H0253: 7, H0052: 7, L0769: 6, H0521: 6, L0742: 6, L0759: 6, H0587: 5, H0618: 5, L0763: 5, L0764: 5, L0744: 5, L0758: 5, H0039: 3, S0210: 3, L0800: 3, L0662: 3, L0794: 3, L0659: 3, L0666: 3, L0747: 3, L0753: 3, L0757: 3, H0483: 2, H0494: 2,	119-137

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| 958 | HOFMH52 | 879744 | 968 | 307 - 777 | 2373 | Arg-106 to Pro-115, Asn-134 to Lys-139, Pro-144 to Asp-151. | S0350: 1, S0188: 1, H0555: 1, H0436: 1, S0390: 1, S3014: 1, S0027: 1, L0780: 1, L0592: 1, L0361: 1, H0668: 1, H0653: 1, S0192: 1, H0542: 1, H0423: 1, S0424: 1, S0456: 1 and H0352: 1. AR039: 12, AR104: 6, AR096: 5, AR033: 5, AR053: 5, AR052: 4, AR089: 4, AR060: 4, AR055: 3, AR061: 2 L0748: 7, L0766: 5, H0040: 3, L0747: 3, L0777: 3, L0755: 3, H0657: 2, H0486: 2, H0596: 2, S0372: 2, L0803: 2, S0126: 2, L0740: 2, L0754: 2, L0749: 2, L0758: 2, S0026: 2, H0170: 1, H0265: 1, H0125: 1, S0358: 1, S0410: 1, S0007: 1, L0717: 1, H0431: 1, H0415: 1, H0333: 1, H0642: 1, T0060: 1, H0156: 1, H0599: 1, H0530: 1, H0081: 1, H0050: 1, L0471: 1, H0239: 1, H0510: 1, H0266: 1, H0179: 1, H0068: 1, H0163: 1, H0087: 1, | 46-64, 27-43 |

959	HWAHE17	879774	969	229 - 633	2374		S0438: 1, L0598: 1, L0500: 1, L0761: 1, L0764: 1, L0805: 1, L0655: 1, L0789: 1, L0663: 1, L0665: 1, H0648: 1, H0215: 1, S0406: 1, L0756: 1, L0759: 1 and H0542: 1.	14-45, 53-70, 35-51
						Pro-80 to Lys-86, Thr-92 to Gln-106.	AR096: 3, AR055: 1, AR033: 1, AR060: 1, AR104: 1, AR061: 1, AR089: 0, AR052: 0 S0354: 1, H0581: 1, L0770: 1, L0752: 1 and L0759: 1.	
960	HWAEG32	879900	970	27 - 530	2375	Leu-70 to Glu-75, Arg-131 to Ser-138.	AR039: 150, AR096: 20, AR053: 19, AR055: 11, AR089: 8, AR052: 4, AR033: 3, AR060: 2, AR061: 2, AR104: 1 S6026: 1, S0222: 1, H0191: 1, H0581: 1, H0544: 1 and H0598: 1.	1-32, 48-66, 78-94
961	HSLHB42	879927	971	479 - 886	2376		AR039: 5, AR033: 1, AR089: 1, AR096: 1, AR060: 1, AR055: 1, AR061: 1, AR053: 1, AR104: 1, AR052: 0 L0439: 9, L0777: 4, S0212: 3, L0794: 3, L0766:	41-57, 17-33, 77-93

962	HDSAC28	879957	972	72 - 425	2377		
					Pro-27 to Leu-34, Ser-41 to His-54, Ala-81 to Ser-90.	3, S0028: 3, L0754: 3, S0222: 2, H0591: 2, L0374: 2, L0803: 2, L0809: 2, H0521: 2, L0752: 2, L0731: 2, H0171: 1, H0713: 1, H0638: 1, S0444: 1, S0410: 1, L0021: 1, H0706: 1, H0545: 1, H0562: 1, H0051: 1, H0188: 1, H0553: 1, L0142: 1, H0090: 1, H0551: 1, L0351: 1, H0561: 1, L0763: 1, L0769: 1, L0761: 1, L0771: 1, L0662: 1, L0768: 1, L0804: 1, L0774: 1, L0806: 1, H0144: 1, S0122: 1, H0659: 1, H0522: 1, S0044: 1, H0626: 1, L0744: 1, L0747: 1, L0756: 1, L0755: 1, S0260: 1, S0436: 1, S0242: 1 and H0542: 1. AR096: 8, AR089: 7, AR055: 7, AR060: 6, AR039: 6, AR033: 5, AR052: 5, AR053: 4, AR104: 4, AR061: 4 H0052: 2, H0255: 1, H0662: 1, H0329: 1, L0789: 1, H0690: 1 and L0747: 1.	99-115, 64-80

963	HFIHT27	879972	973	47 - 1873	2378	Pro-23 to Ser-30, Lys-64 to Gly-69, Arg-110 to Glu-117, Asp-218 to Lys-223, Lys-243 to Gly-249, Ala-448 to Glu-453, Asp-479 to Gln-485, Asn-504 to Ser-510, Pro-547 to Gln-557.	AR052: 3, AR096: 3, AR039: 2, AR061: 2, AR055: 2, AR053: 1, AR089: 1, AR033: 1, AR060: 1, AR104: 1 S0358: 1, H0580: 1, T0039: 1, H0519: 1, S0194: 1 and H0543: 1.	399-415, 335-351, 6-22, 45-61
964	HBIMS61	879980	974	318 - 704	2379		AR039: 30, AR053: 23, AR096: 20, AR033: 18, AR089: 18, AR104: 17, AR052: 16, AR055: 15, AR060: 12, AR061: 9 L0803: 5, L0763: 3, S0360: 2, H0556: 1, H0369: 1, H0392: 1, H0599: 1, H0581: 1, H0251: 1, H0012: 1, L0770: 1, L0800: 1, L0375: 1, L0807: 1, L0809: 1, L0647: 1, L0663: 1, H0593: 1 and L0779: 1.	38-63, 71-94, 10-26
965	HCDAH28	880010	975	781 - 1227	2380		AR061: 11, AR055: 7, AR096: 6, AR060: 5, AR052: 5, AR033: 4, AR089: 3, AR053: 3, AR104: 2, AR039: 2 H0251: 8, H0624: 4, L0752: 4, H0171: 1, H0286:	79-103, 113-136, 8-24

966	HSDFD90	880039	976	866 - 1399	2381	Gln-9 to Gly-15.	AR104: 82, AR033: 43, AR055: 7, AR096: 5, AR089: 4, AR052: 4, AR060: 4, AR039: 4, AR053: 4, AR061: 3 S0126: 2, H0171: 1, S0134: 1, S0053: 1 and S0031: 1. (1, L0598: 1, L0774: 1, S0428: 1, H0144: 1 and S0126: 1.)	143-171, 48-68, 15-33, 73-89
967	HTLJK34	880137	977	177 - 782	2382	Thr-125 to Gly-141, Pro-151 to Leu-156, Cys-160 to Lys-169, Lys-175 to Lys-187.	AR055: 10, AR060: 6, AR061: 5, AR033: 5, AR089: 4, AR096: 4, AR053: 4, AR052: 3, AR104: 3, AR039: 2 L0758: 5, H0618: 1, H0616: 1 and L0794: 1.	30-57, 12-28, 105-121
968	HNGKC65	880142	978	1207 - 1671	2383	Ala-97 to His-105.	AR033: 1, AR039: 1, AR089: 1, AR060: 1, AR096: 1, AR053: 1, AR061: 0, AR052: 0, AR055: 0, AR104: 0 H0687: 2, S0428: 1, H0682: 1 and S0032: 1.	21-52, 53-77, 123-144, 105-121, 14-30
969	HHENP77	880178	979	770 - 2893	2384	Glu-124 to Leu-131, Asp-266 to Pro-271, Asn-273 to Phe-280, Glu-315 to Arg-321,	AR039: 11, AR033: 7, AR096: 6, AR053: 5, AR052: 5, AR104: 4, AR089: 4, AR060: 4,	625-652, 3-19, 210-226, 150-166, 494

970	HDPBD83	880199	980	1139 - 1720	2385			510	100-117
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L0750: 3, H0294: 2, H0619:
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H0551: 2, S0002: 2, L0766:
2, L0774: 2, L0775: 2,
L0602: 2, H0521: 2, L0743:
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L0591: 2, H0422: 2, H0717:
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H0657: 1, H0341: 1, S0356:
1, H0208: 1, S0045: 1,
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H0590: 1, H0004: 1, H0618:
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1, H0100: 1, H0494: 1,
S0344: 1, S0208: 1, S0210:
1, H0529: 1, L0369: 1,

971	HHEVU86	880221	981	157 - 480	2386	Pro-46 to Ser-55, Gly-90 to His-96.	L0640: 1, L0770: 1, L0637: 1, L0372: 1, L0643: 1, L0374: 1, L0375: 1, L0776: 1, L0659: 1, L0636: 1, L0518: 1, L0382: 1, L0519: 1, L0647: 1, L0663: 1, H0144: 1, H0723: 1, H0520: 1, H0690: 1, H0435: 1, H0660: 1, H0672: 1, S0328: 1, H0539: 1, S0152: 1, S0406: 1, L0612: 1, S0037: 1, L0741: 1, L0744: 1, L0439: 1, L0740: 1, L0751: 1, L0757: 1, S0031: 1, H0707: 1, L0485: 1 and H0543: 1.	AR096: 11, AR089: 9, AR039: 8, AR104: 5, AR053: 5, AR052: 5, AR060: 4, AR033: 4, AR055: 1, AR061: 1 H0635: 1, H0052: 1, L0648: 1, L0601: 1 and H0543: 1.	53-75, 28-44
972	HNFIB27	880254	982	309 - 1484	2387			AR096: 3, AR039: 1, AR033: 1, AR061: 1, AR089: 1, AR060: 0, AR055: 0, AR053: 0, AR104: 0	276-309

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973	HAPSG46	880278	983	6 - 434	2388	H0052: 8, H0620: 3, H0494: 2, L0741: 2, S0046: 1, H0645: 1, H0587: 1, H0485: 1, H0156: 1, L0032: 1, H0569: 1, H0012: 1, H0014: 1, T0010: 1, H0375: 1, H0416: 1, H0622: 1, H0553: 1, S0036: 1, H0702: 1, L0438: 1, H0547: 1, H0435: 1, H0660: 1, H0555: 1, L0611: 1 and H0506: 1.		15-39, 90-114, 70-89, 38-60
974	HTEDK31	880341	984	179 - 529	2389	AR061: 2, AR039: 1, AR060: 1, AR089: 1, AR033: 1, AR096: 0, AR053: 0, AR055: 0, AR104: 0, AR052: 0 S0001: 2, H0575: 1, S0388: 1 and S0260: 1.	AR055: 7, AR053: 4, AR060: 4, AR052: 4, AR039: 3, AR033: 3, AR061: 3, AR096: 2, AR089: 2, AR104: 1 H0038: 2, L0770: 2, H0597: 1, H0616: 1, L0560: 1 and L0526: 1.	19-42, 1-18, 77-93, 53-69
975	HCWFW07	880358	985	111 - 662	2390	Pro-22 to Thr-29, Gln-120 to Arg-128, Asn-151 to Phe-167.	AR096: 6, AR104: 4, AR033: 3, AR055: 3, AR060: 3, AR089: 3,	42-68, 97-116

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| 977 | HNTCN90 | 880370 | 987 | 338 - 637 | 2392 | | S0406: 1, L0439: 1, L0755: 1, S0260: 1, L0599: 1 and H0506: 1.

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H0676: 1, H0013: 1, H0553: 1, H0529: 1, H0519: 1, L0745: 1 and L0759: 1. | 33-66, 2-19 |
| 978 | HCMSE07 | 880378 | 988 | 555 - 896 | 2393 | Glu-59 to Gln-65. | AR096: 95, AR039: 83, AR104: 79, AR033: 64, AR060: 48, AR089: 42, AR061: 42, AR053: 40, AR052: 38, AR055: 27
H0651: 155, L0731: 9, L0777: 6, L0803: 4, L0775: 3, H0196: 2, H0163: 2, L0662: 2, L0805: 2, L0783: 2, L0438: 2, L0740: 2, L0759: 2, H0170: 1, S0444: 1, H0592: 1, H0632: 1, L0471: 1, H0399: 1, H0615: 1, H0040: 1, S0294: 1, H0647: 1, L0598: 1, L0763: 1, L0638: 1, L0637: 1, L0642: 1, L0374: 1, L0767: 1, L0768: 1, L0794: 1, | 65-83, 86-102 |

| 979 | HWMEV6 1 | 880405 | 989 | 1227 - 1529 | 2394 | Gln-26 to Cys-32. | L0804: 1, L0774: 1, L0375: 1, L0776: 1, L0606: 1, L0659: 1, L0809: 1, L0647: 1, L0789: 1, L0791: 1, L0666: 1, L0663: 1, L0664: 1, L0665: 1, H0659: 1, H0658: 1, H0672: 1, S0328: 1, H0539: 1, S0380: 1, L0439: 1, L0779: 1, L0594: 1, L0361: 1, S0026: 1, S0242: 1 and S0460: 1. | AR039: 15, AR033: 8, AR104: 5, AR089: 5, AR096: 5, AR052: 5, AR053: 4, AR060: 4, AR055: 4, AR061: 3 H0253: 2, L0455: 2, L0764: 2, L0649: 2, L0754: 2, S0358: 1, H0046: 1, H0617: 1, H0090: 1, H0038: 1, S0142: 1, S0344: 1, L0646: 1, L0771: 1, L0662: 1, L0766: 1, L0803: 1, L0658: 1, L0659: 1, L0789: 1, H0539: 1, S0404: 1, S0406: 1, L0439: 1, L0750: 1, L0777: 1 and L0780: 1. | 55-73, 3-19, 35-51 |
| 980 | HDPWT82 | 880431 | 990 | 41 - 730 | 2395 | | AR033: 2, AR096: 1, AR053: 1, AR060: 1, | 24-56, 183-207, |

981	HBGOU17	880444	991	41 - 505	2396			
					Gln-67 to Ala-73, Ala-85 to Asp-90, Arg-102 to Thr-112.	AR089: 1, AR061: 1, AR104: 0, AR052: 0, AR039: 0, AR055: 0, H0171: 4, L0803: 3, H0521: 3, H0624: 2, S0358: 2, S0222: 1, H0574: 1, L0040: 1, H0622: 1, T0006: 1, L0455: 1, L0763: 1, L0662: 1, L0766: 1, L0655: 1, L0659: 1, L0664: 1, L0665: 1, H0144: 1, S0374: 1, H0522: 1, H0540: 1, L0744: 1, L0779: 1, H0445: 1, L0589: 1, S0458: 1 and H0506: 1.	AR055: 8, AR061: 5, AR060: 4, AR033: 4, AR089: 4, AR052: 4, AR053: 4, AR096: 2, AR104: 2, AR039: 0 L0748: 9, H0617: 4, S0222: 2, L0769: 2, L0756: 2, L0758: 2, H0341: 1, S0001: 1, S0358: 1, H0619: 1, T0040: 1, S0346: 1, H0052: 1, H0081: 1, H0266: 1, L0143: 1, S0142: 1, S0344: 1, L0774: 1, L0784: 1, H0144: 1, H0651: 1, S0027: 1, L0777: 1 and	115-136, 151-169, 70-86, 96-112 118-142

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982	HHAMV78	880520	992	585 - 265	2397	Pro-23 to Gly-29, Glu-101 to Asp-107.	S0011: 1.		60-85

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983	HMALN60	880542	993	3 - 512	2398	Arg-6 to Gln-13, Thr-44 to Ser-50, Pro-145 to Asn-168.	1, L0663: 1, S0374: 1, H0520: 1, S0126: 1, S0190: 1, S0176: 1, H0436: 1, L0757: 1, L0758: 1, H0542: 1, H0543: 1, L0697: 1, L0600: 1 and H0352: 1. AR060: 5, AR096: 3, AR055: 3, AR061: 2, AR104: 1, AR033: 0, AR089: 0, AR053: 0, AR052: 0 S0045: 1, S0278: 1, H0617: 1 and S0044: 1.	93-110
984	HETBT53	880575	994	66 - 1574	2399	Ser-30 to Leu-36, His-55 to Asn-61, Gln-71 to Gln-96, Pro-129 to Lys-136, Lys-146 to Ser-157, Gly-215 to Ala-220, Ala-250 to Ser-256, Phe-316 to Arg-323, Pro-421 to Ala-427, Leu-435 to Asp-440, Ser-453 to Asp-460.	AR060: 6, AR055: 3, AR089: 1, AR039: 1, AR104: 1, AR033: 1, AR061: 1, AR053: 0, AR096: 0, AR052: 0 H0046: 3, L0601: 3, H0013: 2, H0050: 2, H0620: 2, L0774: 2, S0222: 1, L0471: 1, H0012: 1, L0455: 1, S0150: 1, L0770: 1, L0775: 1, L0655: 1, H0144: 1, H0521: 1, H0134: 1, L0752: 1, S0260: 1 and S0042: 1.	166-182, 401-417
985	HRAEC49	880595	995	148 - 1251	2400	Phe-30 to Arg-36, Ser-68 to Trp-75.	AR096: 8, AR089: 7, AR060: 7, AR104: 6,	71-101, 339-363,

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987	HTTCB17	880657	997	55 - 1743	2402			47-63, 233-249
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					Trp-15 to Gly-46.		AR052: 11, AR053: 9, AR055: 8, AR033: 6, AR060: 6, AR096: 5, AR061: 4, AR089: 4, AR104: 4, AR039: 3 L0766: 8, L0748: 7, H0038: 4, H0543: 4, L0779: 3, H0624: 2, S0007: 2, H0083: 2, L0805: 2, L0666: 2, H0547: 2, L0439: 2, L0777: 2, L0758: 2, L0596: 2, L0599: 2, S0026: 2,	

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988	HE9QG38	880670	998	345 - 1646	2403			52-68
						Met-1 to Arg-7, Pro-11 to Phe-16, Gly-23 to Glu-34, Trp-124 to Arg-132, Gln-165 to Asp-181, Phe-216 to Thr-221, Gln-286 to Ser-301, Gly-317 to Gln-322, Asp-357 to Asn-366.	H0657: 1, S0212: 1, H0255: 1, S0420: 1, S0358: 1, S0444: 1, S0360: 1, H0431: 1, S0414: 1, H0004: 1, S0010: 1, H0597: 1, H0546: 1, H0354: 1, H0266: 1, H0383: 1, H0361: 1, H0040: 1, H0616: 1, L0151: 1, H0264: 1, H0560: 1, L0520: 1, L0640: 1, L0638: 1, L0794: 1, L0803: 1, L0375: 1, L0806: 1, L0655: 1, L0663: 1, H0520: 1, H0519: 1, H0670: 1, H0672: 1, S0146: 1, H0555: 1, L0752: 1, L0731: 1, L0759: 1, S0031: 1, H0445: 1, L0595: 1 and L0366: 1.	
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989	HTTJY18	880697	999	310 - 1263	2404	Met-1 to Lys-8, Lys-23 to Ala-31.	H0600: 1, H0632: 1, H0318: 1, H0563: 1, H0428: 1, H0039: 1, H0553: 1, H0090: 1, H0038: 1, H0040: 1, H0623: 1, S0440: 1, S0150: 1, H0641: 1, S0002: 1, L0769: 1, L0764: 1, L0662: 1, L0775: 1, L0776: 1, H0547: 1, S0126: 1, S0152: 1, L0740: 1, L0754: 1, L0749: 1, L0777: 1, L0752: 1, H0423: 1 and H0422: 1. AR096: 3, AR052: 1, AR055: 1, AR039: 1, AR104: 1, AR089: 1, AR053: 1, AR061: 1, AR060: 0, AR033: 0 L0766: 43, L0754: 12, L0740: 11, S0358: 9, H0575: 7, L0803: 7, L0747: 6, L0731: 6, L0761: 5, L0662: 5, L0805: 5, L0744: 5, L0748: 5, L0779: 5, L0794: 4, H0710: 4, L0749: 4, L0750: 4, L0752: 4, L0757: 4, L0471: 3, H0264: 3, S0210: 3, L0806: 3, S0126: 3, S0328: 3, L0743: 3, L0777: 3, L0759: 3, H0423: 3, S0376: 2, H0013:	282-308, 110-126

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L0755: 2, L0362: 2, S0026:
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1, S0442: 1, S0046: 1,
S6022: 1, H0611: 1, H0370:
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H0274: 1, S0010: 1, L0105:
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H0251: 1, H0046: 1, H0572:
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H0012: 1, S0050: 1, H0014:
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S0250: 1, S0003: 1, T0023:
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H0031: 1, L0142: 1, L0055:
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		2405	Ser-30 to Leu-35, Pro-44 to Glu-63, Arg-138 to Ala-143, Phe-170 to Asp-177, Arg-248 to Phe-253, Ser-270 to Ala-277, Asp-322 to Gly-335, Leu-363 to Ser-369, Tyr-381 to Glu-388, Arg-455 to Arg-460.
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	880733		
990	HPSND10		

991	HDABX58	880753	1001	924 - 1490	2406	Met-1 to Thr-7, Trp-12 to Trp-17.	L0382: 1, L0791: 1, L0793: 1, L0352: 1, S0432: 1, L0741: 1 and L0779: 1. AR052: 8, AR039: 7, AR033: 7, AR089: 7, AR053: 6, AR096: 6, AR104: 5, AR055: 5, AR060: 4, AR061: 4 L0803: 9, L0740: 9, L0769: 6, L0794: 5, L0805: 5, L0439: 5, L0518: 4, H0059: 3, L0809: 3, L0757: 3, H0550: 2, S0222: 2, H0497: 2, H0618: 2, H0620: 2, S0051: 2, L0638: 2, L0747: 2, L0750: 2, L0596: 2, L0605: 2, H0265: 1, H0583: 1, H0381: 1, S0282: 1, H0254: 1, H0255: 1, S0418: 1, S0360: 1, S0007: 1, H0486: 1, H0156: 1, H0052: 1, H0263: 1, H0545: 1, H0457: 1, H0150: 1, H0050: 1, T0010: 1, H0083: 1, H0286: 1, H0428: 1, H0418: 1, H0673: 1, S0036: 1, H0551: 1, H0264: 1, H0494: 1, H0130: 1, L0770: 1, L0761: 1, L0646: 1, L0800: 1, L0662: 1, L0768:	9q34.1	103000, 114350, 120900, 131195, 185000, 189980, 600184, 602575, 602575	37-57, 138-154, 82-98

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| 993 | HELGM94 | 880807 | 1003 | 73 – | 2408 | Lys-91 to Ala-106, | AR061: 6, AR055: 5, AR033: 5, AR052: 4, AR096: 4, AR060: 3, AR089: 3, AR053: 3, AR104: 1 L0770: 6, L0766: 5, L0777: 5, L0759: 4, H0052: 2, L0769: 2, L0750: 2, L0592: 2, L0608: 2, S0040: 1, H0663: 1, H0497: 1, H0575: 1, L0157: 1, H0591: 1, H0264: 1, L0764: 1, L0662: 1, L0774: 1, H0144: 1, L0438: 1, S0126: 1, H0683: 1, H0521: 1, L0751: 1, L0754: 1, L0749: 1, L0752: 1, L0753: 1, L0758: 1, S0434: 1, H0543: 1 and H0422: 1. AR096: 13, AR089: 10, AR096: 10, | 16p11.2 | 147781, | 37-56, 5-21 |

994	HJBBC09	880809	1004	102 - 1577	1437				
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995	HTXJF02	880913	1005	122 - 646	2410	Ala-15 to Gln-20, Tyr-89 to Glu-103, Lys-156 to Gly-163.	AR033: 77, AR052: 62, AR053: 55, AR104: 36, AR089: 23, AR055: 22, AR096: 21, AR060: 12, AR039: 9, AR061: 9 H0556: 1, H0295: 1, S0418: 1, S0354: 1, H0586: 1, H0587: 1 and H0494: 1.	134-155, 26-45, 59-77, 112-129
996	HKAEN78	880927	1006	66 - 479	2411	Tyr-46 to Gly-52.	AR104: 7, AR033: 6, AR053: 6, AR052: 6, AR039: 5, AR060: 3, AR055: 3, AR096: 3, AR089: 3, AR061: 1 S0356: 2, S0002: 2, L0772: 2, L0748: 2, L0758: 2,	99-115, 16-32

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997	HKADD76	880936	1007	93 - 1070	2412	Arg-49 to Tyr-62, Tyr-88 to Ala-97, Gly-230 to Lys-239, Gln-270 to Cys-276, Glu-296 to Gly-304.	AR096: 2, AR052: 1, AR061: 1, AR089: 1, AR060: 0, AR053: 0, AR033: 0, AR039: 0, AR104: 0 H0264: 4, H0488: 4, S0328: 3, S0306: 2, S0476: 1, H0272: 1, H0487: 1, H0494: 1, H0633: 1, L5623: 1 and S0330: 1.	L0581: 2, H0265: 1, H0556: 1, H0341: 1, S0212: 1, S0444: 1, S0360: 1, H0249: 1, H0331: 1, H0744: 1, H0290: 1, H0100: 1, T0042: 1, H0494: 1, L0369: 1, L0763: 1, L0646: 1, L0645: 1, L0764: 1, L0771: 1, L0662: 1, L0381: 1, H0576: 1, L0777: 1, L0755: 1 and L0595: 1.	2		239-268, 145-171, 100-118, 194-210, 5-21, 65-81, 132-148, 308-324
998	HKIYF62	880972	1008	140 - 517	2413	Val-7 to Lys-12, Tyr-58 to Leu-64, Arg-91 to Ser-104, Pro-117 to Val-126.	AR039: 28, AR096: 21, AR104: 18, AR060: 16, AR061: 16, AR089: 15, AR053: 15, AR055: 14, AR033: 13, AR052: 10 L0748: 17, H0521: 13, L0655: 4, H0522: 4, L0754: 4, H0575: 3, L0439: 3,		11q13	102200, 106100, 131100, 131100, 131100, 133780, 147050, 153700,	70-90, 12-28

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999	HBXAT65	881010	1009	145 - 918	2414	AR104: 17, AR033: 17, AR060: 15, AR061: 9, AR053: 7, AR089: 4, AR052: 4, AR039: 3, AR096: 2 L0438: 7, L0769: 4,	Asp-18 to Gly-24, Asp-63 to Met-70, Ser-82 to Pro-89, Glu-117 to Ser-125, Glu-151 to Asp-171.	L0605: 3, H0619: 2, S0010: 2, H0050: 2, S0051: 2, H0644: 2, S0344: 2, L0646: 2, L0775: 2, L0776: 2, L0666: 2, L0758: 2, L0366: 2, S0282: 1, H0255: 1, H0661: 1, S0358: 1, H0406: 1, H0550: 1, S0222: 1, H0441: 1, H0592: 1, H0632: 1, S0280: 1, H0590: 1, H0309: 1, H0327: 1, H0150: 1, H0123: 1, H0024: 1, H0014: 1, T0010: 1, H0355: 1, H0510: 1, H0375: 1, H0328: 1, T0006: 1, H0031: 1, L0143: 1, H0087: 1, S0112: 1, L0435: 1, S0142: 1, L0770: 1, L0773: 1, L0767: 1, L0794: 1, L0803: 1, L0805: 1, L0606: 1, L0659: 1, L0809: 1, L0791: 1, H0658: 1, S0328: 1, S0380: 1, L0749: 1, L0756: 1, L0777: 1 and S0436: 1.	161015, 164009, 168461, 168461, 168461, 180721, 180840, 191181, 193235, 209901, 232600, 259700, 259770, 600045, 600319, 600528, 601884	225-252, 181-202

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1, L0717: 1, H0441: 1,
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H0099: 1, H0179: 1, T0023: 1, H0673: 1, H0264: 1,
H0102: 1, H0494: 1, H0561: 1, H0538: 1, L0598: 1,
L0637: 1, L0667: 1, L0772:

| 1009 | HCFCN07 | 881450 | 1019 | 66 - 575 | 2424 | Ser-48 to Trp-54, Pro-77 to Phe-84, Leu-89 to Leu-103, Met-110 to Asp-132, Glu-165 to Glu-170. | AR089: 12, AR033: 9, AR052: 8, AR053: 7, AR039: 7, AR055: 6, AR096: 5, AR060: 5, AR061: 2, AR104: 2 L0747: 8, L0752: 7, S0358: 6, L0758: 6, H0521: 5, L0740: 5, L0757: 5, L0771: 4, L0749: 4, L0731: 4, L0362: 4, S0360: 3, H0486: 3, H0551: 3, L0766: 3, L0775: 3, S0376: 2, 1, L0373: 1, L0646: 1, L0800: 1, L0662: 1, L0364: 1, L0649: 1, L0650: 1, L0653: 1, L0655: 1, L0542: 1, L0526: 1, L0789: 1, L0663: 1, L0664: 1, L0665: 1, L0565: 1, H0520: 1, S0126: 1, H0659: 1, H0658: 1, H0660: 1, H0651: 1, H0521: 1, H0696: 1, L0744: 1, L0439: 1, L0751: 1, L0745: 1, L0746: 1, L0747: 1, L0756: 1, L0779: 1, L0777: 1, L0755: 1, L0731: 1, L0588: 1, L0581: 1, L0361: 1, S0242: 1, H0542: 1, UNKWN: 1, L0600: 1 and H0352: 1. | 54-78, 17-40 |

H0457: 2, H0050: 2, H0266: 2, S0214: 2, S0036: 2, H0647: 2, L0769: 2, L0764: 2, L0776: 2, L0659: 2, H0593: 2, L0744: 2, L0748: 2, L0756: 2, L0777: 2, L0755: 2, S0260: 2, L0590: 2, L0599: 2, H0422: 2, S0398: 2, H0170: 1, H0265: 1, S0040: 1, T0049: 1, H0650: 1, H0663: 1, S0354: 1, H0580: 1, S0007: 1, S0045: 1, H0586: 1, H0587: 1, L0622: 1, H0013: 1, H0156: 1, H0042: 1, H0318: 1, H0546: 1, H0373: 1, S0388: 1, H0040: 1, H0264: 1, S0150: 1, S0344: 1, L0763: 1, L0770: 1, L0772: 1, L0646: 1, L0648: 1, L0662: 1, L0768: 1, L0774: 1, L0806: 1, L0805: 1, L0653: 1, L0655: 1, L0809: 1, L0789: 1, H0144: 1, S0374: 1, H0547: 1, H0519: 1, S0126: 1, S0122: 1, H0690: 1, H0658: 1, H0522: 1, S0027: 1, L0779: 1, L0759: 1, L0595: 1, S0026: 1, S0276: 1, H0542: 1,

1010	HLWDZ66	881490	1020	219 - 683	2425		65-81
					Pro-8 to Ser-18, Thr-59 to Gly-66, Asn-107 to Gln-112, Ser-136 to Glu-152.	S0424: 1, H0677: 1 and H0506: 1. AR096: 4, AR033: 4, AR089: 3, AR053: 3, AR052: 3, AR060: 3, AR039: 2, AR104: 1, AR055: 1, AR061: 1 L0759: 7, L0803: 6, L0666: 4, L0805: 3, L0756: 3, L0362: 3, L0646: 2, L0794: 2, L0766: 2, L0659: 2, H0144: 2, L0438: 2, H0520: 2, L0779: 2, L0596: 2, H0423: 2, L0600: 2, H0170: 1, S0114: 1, H0650: 1, S0358: 1, S0360: 1, H0329: 1, S0222: 1, H0497: 1, T0040: 1, H0036: 1, H0051: 1, H0687: 1, S0214: 1, H0615: 1, H0428: 1, H0622: 1, H0553: 1, H0598: 1, H0040: 1, H0634: 1, L0060: 1, T0041: 1, L0773: 1, L0774: 1, L0657: 1, L0809: 1, L0789: 1, L0664: 1, H0519: 1, S0126: 1, H0689: 1, H0435: 1, H0670: 1, H0555: 1, L0748: 1, L0439: 1, L0731: 1, S0031: 1 and S0434: 1.	

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1011	HEONP58	881498	1021	80 - 568	2426	Trp-114 to Ala-120, Thr-147 to Asp-153.	AR039: 3, AR033: 3, AR089: 2, AR061: 2, AR096: 2, AR052: 2, AR055: 2, AR060: 1, AR104: 1, AR053: 1 L0809: 3, L0769: 2, L0764: 2, L0773: 2, L0766: 2, L0774: 2, L0659: 2, L0438: 2, S0328: 2, L0731: 2, L0603: 2, H0583: 1, H0549: 1, H0438: 1, H0586: 1, H0486: 1, H0052: 1, H0457: 1, H0553: 1, H0561: 1, L0640: 1, L0770: 1, L0638: 1, L0761: 1, L0800: 1, L0644: 1, L0771: 1, L0662: 1, L0767: 1, L0768: 1, L0775: 1, L0655: 1, L0559: 1, L0518: 1, L0783: 1, L0789: 1, L0790: 1, L0664: 1, S0380: 1, S0406: 1, L0777: 1 and L0757: 1.	91-114, 3-23, 59-75
1012	HMAGN19	881531	1022	694 - 1074	2427	Pro-12 to Ala-23, Thr-90 to Thr-95.	AR096: 4, AR052: 3, AR039: 2, AR053: 2, AR089: 1, AR104: 1, AR060: 1, AR033: 1, AR061: 1, AR055: 0 S0045: 6, S0028: 5, S0278: 2, S0031: 2, S0282: 1, S0046: 1, S6026: 1, H0550:	95-121, 32-48

1013	HFCAP42	881569	1023	640 - 1227	2428		1q31		84-101, 175-191

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AR033: 2, AR104: 1, AR053: 1, AR052: 1, AR089: 1, AR060: 1, AR061: 0, AR039: 0, AR055: 0, AR096: 0 H0545: 7, H0617: 7, S0360: 4, H0658: 4, H0494: 3, H0295: 2, S0212: 2, H0661: 2, S0358: 2, H0606: 2, S0440: 2, L0769: 2, L0794: 2, L0783: 2, L0749: 2, L0601: 2, H0713: 1, H0717: 1, H0716: 1, H0294: 1, S0418: 1, S0356: 1, H0733: 1, S0045: 1, S0132: 1, S0278: 1, H0586: 1, L0622: 1, H0599: 1, H0581: 1, S0049: 1, H0052: 1, H0309: 1, H0544: 1, H0150: 1, H0009: 1, H0564: 1, H0620: 1, S0388: 1, H0375: 1, H0615: 1, H0031: 1, S0036: 1, H0059: 1, S0450: 1, H0633: 1, S0426: 1, L0371: 1, L0770: 1, L0645: 1, L0768: 1, L0804: 1,

OMIM numbers cell: 134580, 145001, 145260, 150292, 208250, 226450, 600105, 600759, 600995, 601652

1014	HWBBT49	881570	1024	70 - 1095	2429	Glu-96 to Lys-106.	L0775: 1, L0806: 1, L0653: 1, L0790: 1, L0666: 1, H0547: 1, S0126: 1, H0689: 1, H0539: 1, S3012: 1 and L0740: 1.	AR096: 1, AR052: 1, AR033: 0, AR061: 0, AR089: 0, AR055: 0, AR053: 0, AR039: 0, AR060: 0, AR104: 0 L0439: 6, S0002: 5, S0360: 3, H0580: 3, H0575: 3, S0346: 3, L0483: 3, L0804: 3, L0748: 3, H0597: 2, S0144: 2, L0662: 2, L0517: 2, L0665: 2, L0438: 2, L0754: 2, L0779: 2, S0242: 2, S0420: 1, S0356: 1, H0574: 1, H0042: 1, H0570: 1, H0510: 1, H0375: 1, S6028: 1, H0622: 1, L0194: 1, H0634: 1, H0413: 1, S0464: 1, S0344: 1, L0638: 1, L0761: 1, L0643: 1, L0493: 1, L0659: 1, L0783: 1, L0530: 1, L0666: 1, S0374: 1, H0593: 1, S0126: 1, H0435: 1, H0521: 1, H0478: 1, L0749: 1, L0777: 1, L0731: 1, H0445: 1,	2-23, 52-68, 128-144

| 1015 | HDPBT62 | 881683 | 1025 | 90 - 473 | 2430 | Asn-31 to Thr-37, Arg-83 to Asn-88. | S0434: 1, S0194: 1 and H0543: 1. AR039: 45, AR053: 40, AR104: 30, AR096: 29, AR052: 29, AR033: 27, AR089: 23, AR055: 20, AR060: 16, AR061: 14 H0521: 3, H0457: 2, H0497: 1, H0014: 1, H0179: 1, L0766: 1, H0698: 1, H0542: 1 and H0506: 1. | 43-59, 90-106 |
| 1016 | HDTIT02 | 881693 | 1026 | 111 - 572 | 2431 | Thr-29 to Arg-36, Cys-41 to Arg-57, Lys-62 to Gln-67, Gly-75 to Ile-83, Lys-123 to Thr-131, Leu-137 to Glu-145. | AR089: 11, AR033: 9, AR052: 7, AR060: 7, AR053: 6, AR055: 5, AR061: 4, AR096: 2, AR104: 2, AR039: 0 L0747: 16, L0748: 15, L0731: 10, L0752: 8, L0775: 7, L0750: 7, S0328: 9, 6, L0757: 6, S0358: 5, S3014: 5, S0354: 3, H0038: 3, H0040: 3, L0774: 3, S0378: 3, H0696: 3, S0360: 2, H0393: 2, H0587: 2, H0069: 2, H0110: 2, H0413: 2, T0042: 2, S0422: 2, L0763: 2, L0770: 2, L0772: 2, L0764: 2, L0768: 2, L0806: 2, L0666: 2, H0659: | 99-122 |

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1017	HWHHS59	881714	1027	46 - 612	2432	Pro-19 to Ala-24.	1, S0196: 1, H0542: 1, H0422: 1 and S0384: 1. AR096: 8, AR053: 8, AR052: 7, AR089: 6, AR033: 6, AR055: 4, AR060: 4, AR104: 3, AR039: 2, AR061: 2 H0052: 3, L0751: 3, H0624: 2, S0418: 2, L0562: 2, H0179: 2, L0761: 2, L0771: 2, L0766: 2, L0659: 2, L0750: 2, L0777: 2, L0590: 2, S0376: 1, H0261: 1, H0592: 1, H0586: 1, H0587: 1, H0581: 1, H0546: 1, H0571: 1, H0083: 1, H0266: 1, H0181: 1, H0617: 1, H0124: 1, H0634: 1, H0551: 1, H0488: 1, L0351: 1, L0769: 1, L0637: 1, L0662: 1, L0378: 1, L0805: 1, L0655: 1, L0788: 1, L0666: 1, L0664: 1, L0665: 1, H0547: 1, H0519: 1, H0659: 1, H0521: 1, L0439: 1, L0747: 1, L0779: 1, L0758: 1 and H0543: 1.	156-175, 67-83, 7-23, 45-61
1018	HJPCP29	881766	1028	24 - 737	2433	Gln-81 to Gly-88.	AR055: 9, AR053: 5, AR052: 5, AR096: 5,	27-56, 164-181,

1019	HHEBM09	881890	1029	132 - 461	2434	Leu-22 to Ser-27.		85-104, 65-83

AR033: 5, AR060: 4, AR089: 4, AR061: 3, AR039: 3, AR104: 3 L0758: 5, S0358: 4, L0439: 4, S0356: 3, L0751: 3, L0747: 3, L0779: 3, H0265: 2, H0381: 2, H0331: 2, H0052: 2, H0009: 2, L0157: 2, H0617: 2, L0769: 2, L0806: 2, L0783: 2, L0750: 2, S0436: 2, H0556: 1, H0685: 1, L0619: 1, L0005: 1, S0444: 1, H0619: 1, H0587: 1, H0566: 1, H0051: 1, H0083: 1, T0006: 1, L0055: 1, H0316: 1, H0135: 1, H0616: 1, H0551: 1, H0494: 1, L0372: 1, L0648: 1, L0768: 1, L0803: 1, L0379: 1, L0807: 1, L0659: 1, L0793: 1, L0665: 1, H0520: 1, H0547: 1, H0689: 1, H0539: 1, H0522: 1, H0696: 1, S3012: 1, S3014: 1, L0748: 1, L0777: 1, H0543: 1 and H0506: 1.

AR096: 5, AR104: 4, AR039: 4, AR052: 4, AR053: 3, AR055: 2, AR089: 2, AR033: 2,

132-149, 105-121, 59-75

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1020	HDPIV17	881907	1030	41 – 739	2435	Ser-62 to Ala-69, Gly-77 to Gly-98.	AR061: 1, AR060: 1 L0748: 3, S0250: 1, L0751: 1 and H0542: 1. AR060: 1, AR055: 1, AR089: 1, AR061: 1, AR033: 0, AR096: 0, AR039: 0, AR052: 0, AR053: 0, AR104: 0 L0766: 3, H0635: 1, H0318: 1, H0581: 1, H0457: 1, H0179: 1, H0560: 1, H0561: 1, L0764: 1, L0794: 1, L0803: 1, L0775: 1, L0806: 1, L0790: 1, L0791: 1, L0792: 1, L0665: 1, L0521: 1, L0779: 1 and L0758: 1.	180-196, 118-134, 8-24, 44-60
1021	HBGNO49	881968	1031	86 – 496	2436	Pro-16 to Gly-24, Glu-41 to Phe-49, Glu-81 to Gln-95, Arg-104 to Ser-114.	AR052: 18, AR055: 16, AR033: 14, AR053: 12, AR104: 11, AR089: 9, AR096: 8, AR061: 8, AR060: 8, AR039: 0 H0617: 3 and H0428: 1.	50-72
1022	HWAFQ40	882003	1032	149 – 562	2437	Met-1 to Ser-12, Pro-28 to Cys-39.	AR055: 1, AR060: 1, AR039: 0, AR052: 0, AR061: 0, AR089: 0, AR096: 0, AR053: 0, AR033: 0, AR104: 0 L0766: 34, S0360: 7,	82-105

L0731: 7, S0152: 6, L0779: 6, H0144: 5, L0751: 5, L0752: 5, L0809: 4, H0521: 4, L0759: 4, L0590: 4, H0543: 4, H0341: 3, H0575: 3, H0251: 3, S0003: 3, L0747: 3, L0749: 3, L0757: 3, L0599: 3, S0212: 2, S0358: 2, H0549: 2, H0592: 2, H0497: 2, H0486: 2, H0013: 2, H0318: 2, H0038: 2, H0040: 2, H0623: 2, H0560: 2, L0775: 2, S0122: 2, S0028: 2, L0743: 2, L0750: 2, L0777: 2, L0758: 2, H0445: 2, L0604: 2, S0194: 2, L0600: 2, H0159: 1, S0134: 1, L0785: 1, H0662: 1, H0402: 1, L0481: 1, S0420: 1, S0356: 1, H0637: 1, H0393: 1, H0431: 1, H0612: 1, H0587: 1, T0039: 1, H0427: 1, L0021: 1, H0599: 1, H0004: 1, S0010: 1, H0581: 1, H0421: 1, S0049: 1, H0544: 1, H0545: 1, L0471: 1, H0014: 1, L0163: 1, H0083: 1, H0510: 1, H0375: 1, S0250: 1, S0022: 1, S0214: 1,

1023	HTLGZ03	882014	1033	1117 - 1545	2438	Ser-10 to Pro-17.		114-142
							H0622: 1, H0674: 1, H0316: 1, H0551: 1, H0264: 1, H0100: 1, H0494: 1, H0509: 1, S0002: 1, S0426: 1, L0369: 1, L0770: 1, L0769: 1, L0761: 1, L0772: 1, L0644: 1, L0764: 1, L0521: 1, L0662: 1, L0804: 1, L0774: 1, L0655: 1, L0527: 1, L0663: 1, S0374: 1, H0520: 1, H0547: 1, H0593: 1, S0126: 1, H0660: 1, S0328: 1, H0539: 1, S0380: 1, H0522: 1, L0740: 1, L0754: 1, L0605: 1, L0608: 1, L0362: 1, L0366: 1, S0026: 1, H0667: 1, H0136: 1, H0542: 1, S0424: 1 and H0506: 1.	
							AR055: 11, AR060: 6, AR033: 6, AR061: 5, AR052: 5, AR089: 5, AR053: 4, AR096: 4, AR104: 3, AR039: 2 H0253: 4, H0584: 3, H0457: 3, L0005: 2, H0587: 2, H0599: 2, H0581: 2, H0539: 2, H0521: 2, S0040: 1, H0583: 1, H0657: 1, H0484: 1, H0254: 1, H0402: 1	

| 1024 | HLYCX18 | 882016 | 1034 | 208 - 549 | 2439 | Trp-38 to Phe-43, Phe-103 to Trp-109. | 1, H0441: 1, H0497: 1, H0486: 1, H0590: 1, H0618: 1, H0318: 1, H0050: 1, H0617: 1, H0634: 1, T0041: 1, H0529: 1, L0803: 1, L0663: 1, H0697: 1, H0593: 1, H0658: 1, H0436: 1, L0742: 1, L0743: 1, L0750: 1, L0758: 1, L0593: 1, L0603: 1, H0136: 1, H0543: 1 and H0422: 1. | AR060: 243, AR033: 180, AR061: 154, AR039: 144, AR104: 119, AR055: 109, AR089: 102, AR053: 56, AR052: 54, AR096: 51 L0777: 1 and H0445: 1. | 65-91 |
| 1025 | HSDEK82 | 882064 | 1035 | 129 - 503 | 2440 | Pro-5 to Gln-17. | AR104: 20, AR033: 14, AR060: 7, AR055: 7, AR039: 6, AR096: 5, AR061: 5, AR089: 4, AR053: 3, AR052: 3 | S0051: 5, L0666: 4, S0388: 3, L0438: 3, S0036: 2, L0774: 2, L0805: 2, H0593: 2, H0670: 2, L0748: 2, L0752: 2, S0434: 2, S6024: 1, H0294: 1, S0030: 1, S0442: 1, S0360: 1, H0406: | 61-91, 34-58, 99-119 |

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| 1026 | HCEMU86 | 882164 | 1036 | 347 - 787 | 2441 | Pro-83 to Thr-88. | AR104: 6, AR033: 6, AR055: 4, AR039: 3, AR096: 3, AR060: 3, AR089: 3, AR061: 2, AR053: 2, AR052: 2 L0439: 21, L0438: 12, L0769: 9, T0010: 6, H0052: 5, L0776: 4, L0805: 3, S0126: 3, L0741: 3, L0589: 3, H0261: 2, T0006: 2, L0455: 2, L0659: 2, H0519: 2, L0742: 2, L0748: 2, L0751: 2, L0592: 2, S0276: 2, H0583: 1, L0418: 1, S0298: 1, S0001: 1, S0400: 1, L0394: 1, S0222: 1, H0455: 1, H0331: 1, H0156: 1, T0082: 1, N0006: 1, H0570: 1, S6028: 1, H0644: 1, S0036: 1, H0100: 1, L0351: 1, S0352: 1, L0598: | 1, S0010: 1, L0040: 1, H0012: 1, H0620: 1, H0014: 1, S0048: 1, T0010: 1, H0673: 1, H0038: 1, H0494: 1, L0770: 1, L0769: 1, L0662: 1, L0806: 1, L0783: 1, L0663: 1, L0664: 1, S0330: 1, H0478: 1, L0741: 1, L0779: 1 and S0031: 1. | 95-118, 51-73, 117-137, 6-23, 31-48 |

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L0651: 2, L0653: 2, L0807:
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2, S0380: 2, H0704: 2,
S0044: 2, S0027: 2, L0754:
2, L0745: 2, L0599: 2,
L0362: 2, L0601: 2, H0653:
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H0716: 1, S6024: 1, T0049:
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1, S0420: 1, S0356: 1,
S0444: 1, H0208: 1, S0045:
1, S0132: 1, H0645: 1,
L0717: 1, H0351: 1, S0278:
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H0370: 1, H0357: 1, H0587:
1, H0331: 1, H0486: 1,
H0635: 1, H0002: 1, H0042:
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S0346: 1, S0474: 1, H0052:
1, H0263: 1, T0115: 1,
H0327: 1, H0530: 1, H0198:
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H0252: 1, H0328: 1, H0615:
1, H0428: 1, T0006: 1,
H0032: 1, H0068: 1, H0316:
1, H0135: 1, H0163: 1,
H0090: 1, H0591: 1, H0038:
1, H0551: 1, H0412: 1,
H0413: 1, H0100: 1, T0042:
1, H0625: 1, L0065: 1,
S0150: 1, H0633: 1, H0646:
1, H0649: 1, H0652: 1,
S0142: 1, S0002: 1, L0769:
1, L0761: 1, L0667: 1,
L0772: 1, L0373: 1, L0643:
1, L0764: 1, L0771: 1,
L0662: 1, L0794: 1, L0784:
1, L0806: 1, L0526: 1,
L0547: 1, L0647: 1, L0791:
1, L0666: 1, L0663: 1,
H0701: 1, H0691: 1, H0593:
1, H0682: 1, H0658: 1,
L0355: 1, S0328: 1, H0539:
1, H0710: 1, H0518: 1,
H0521: 1, H0522: 1, H0478:
1, S0206: 1, L0751: 1,
L0746: 1, L0750: 1, L0780:
1, L0757: 1, L0759: 1,
L0592: 1, L0594: 1, H0668:
1, S0026: 1, S0196: 1,
H0543: 1, H0422: 1 and

| 1028 | HEORN16 | 882261 | 1038 | 431 - 1084 | 2443 | Met-99 to Ala-114, Pro-138 to Arg-143, Thr-169 to Arg-176, Ser-207 to Pro-218. | S0460: 1.
AR033: 4, AR089: 3, AR053: 2, AR060: 2, AR061: 2, AR055: 2, AR096: 1, AR052: 1, AR039: 0, AR104: 0
L0747: 5, L0749: 4, H0657: 3, H0553: 3, L0758: 3, S0040: 2, H0341: 2, L0789: 2, L0748: 2, L0779: 2, L0753: 2, H0542: 2, H0265: 1, H0669: 1, S0418: 1, H0370: 1, H0586: 1, H0497: 1, H0427: 1, H0036: 1, H0253: 1, H0457: 1, H0086: 1, H0081: 1, H0355: 1, S0338: 1, S0340: 1, H0039: 1, H0181: 1, S0366: 1, H0598: 1, H0135: 1, H0063: 1, H0412: 1, H0413: 1, H0652: 1, S0422: 1, S0002: 1, H0529: 1, L0369: 1, L0770: 1, L0772: 1, L0642: 1, L0771: 1, L0521: 1, L0381: 1, H0658: 1, H0666: 1, H0539: 1, H0521: 1, H0522: 1, S0044: 1, H0187: 1, H0436: 1, L0741: 1, L0746: 1, L0777: 1, L0780: 1, H0343: 1, H0595: | 40-61, 1-22, 61-77 |

1029	HKGBJ74	882285	1039	183 - 530	2444	1, H0707: 1, S0434: 1 and S0424: 1. AR052: 4, AR096: 4, AR053: 4, AR104: 3, AR039: 3, AR089: 2, AR055: 2, AR033: 2, AR060: 1, AR061: 1 H0549: 1 and H0538: 1.	42-58, 98-114
1030	HOSPA48	882296	1040	119 - 1126	2445	Ala-6 to Gly-11, Ser-20 to Ser-30, Ser-60 to Ser-65, Ser-157 to Glu-170, Lys-179 to Asp-184, Ser-285 to Val-290, Pro-306 to Ser-314. AR053: 1, AR104: 1, AR052: 1, AR089: 1, AR061: 0, AR033: 0, AR096: 0, AR060: 0, AR039: 0, AR055: 0 S0003: 6, L0777: 4, L0752: 4, H0617: 3, H0553: 2, H0124: 2, L0804: 2, L0757: 2, H0662: 1, S0045: 1, H0266: 1, S0214: 1, H0598: 1, L0666: 1, S0126: 1, H0651: 1, L0588: 1 and H0422: 1.	317-336, 131-147, 30-46, 201-217
1031	HWHQN1 6	882307	1041	124 - 1023	2446	Met-1 to Tyr-17. AR055: 3, AR060: 3, AR033: 3, AR061: 2, AR104: 2, AR053: 1, AR039: 1, AR089: 1, AR096: 1, AR052: 1 L0748: 12, H0521: 11, L0755: 9, S0474: 8, L0662: 7, S0436: 7, L0596: 6,	213-245, 184-211, 100-130, 133-156, 247-267, 162-181

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S0342: 1, H0713: 1, H0716: 1, H0295: 1, S0218: 1, S0116: 1, S0212: 1, H0484: 1, H0664: 1, H0662: 1, S0418: 1, S0442: 1, S0354: 1, H0729: 1, H0722: 1, H0733: 1, L0717: 1, H0431: 1, H0600: 1, H0587: 1, H0333: 1, H0331: 1, H0559: 1, H0486: 1, H0013: 1, H0250: 1, H0427: 1, S0280: 1, L0021: 1, H0599: 1, H0036: 1, L0563: 1, H0581: 1, H0173: 1, H0545: 1, H0457: 1, L0041: 1, H0150: 1, H0123: 1, H0081: 1, H0050: 1, H0197: 1, T0010: 1, H0375: 1, H0267: 1, H0188: 1, S0250: 1, H0032: 1, H0040: 1, H0616: 1, H0087: 1, H0413: 1, H0100: 1, S0112: 1, H0560: 1, H0561: 1, H0131: 1, S0144: 1, S0142: 1, S0344: 1, L0631: 1, L0770: 1, L0772: 1, L0646: 1, L0643: 1, L0771: 1, L0773: 1, L0363: 1, L0766: 1, L0650: 1, L0375: 1, L0376: 1, L0654: 1, L0655: 1, L0658: 1,

| 1032 | HRDEP41 | 882351 | 1042 | 33 - 500 | 2447 | Gly-48 to Tyr-53, His-95 to Trp-117, Ser-123 to Gln-128. | AR033: 12, AR104: 7, AR055: 5, AR060: 3, AR053: 3, AR052: 3, AR096: 3, AR089: 2, AR061: 2, AR039: 0 S0022: 6, L0770: 6, L0769: 6, L0758: 5, S0051: 4, H0521: 4, L0747: 4, L0756: 4, H0638: 3, H0124: 3, L0794: 3, L0805: 3, S0278: 2, S0222: 2, H0052: 2, H0327: 2, H0100: 2, L0789: 2, L0438: 2, L0439: 2, L0751: 2, L0777: 2, L0591: 2, S0282: 1, S0356: 1, L0717: 1, H0441: 1, H0587: 1, L0163: 1, H0051: 1, S0048: 1, H0594: 1, | L0382: 1, L0543: 1, L0664: 1, S0428: 1, H0690: 1, H0682: 1, H0670: 1, H0660: 1, H0648: 1, H0710: 1, H0518: 1, S0152: 1, H0522: 1, S0406: 1, H0478: 1, L0611: 1, S0390: 1, S0037: 1, S0206: 1, L0743: 1, L0758: 1, S0031: 1, S0260: 1, H0595: 1, L0588: 1, L0604: 1, H0423: 1 and H0422: 1. | 63-89, 2-18 |

#	Clone ID				SEQ	Features (aa)	cDNA Clones	Band	Tissue/OMIM Nos.	aa ranges
1033	HFVIK60	882352	1043	589 – 999	2448		H0328: 1, L0455: 1, S0036: 1, S0038: 1, S0344: 1, L0761: 1, L0775: 1, L0375: 1, L0776: 1, L0659: 1, L0809: 1, L0647: 1, L0750: 1, L0753: 1 and H0445: 1. AR055: 10, AR039: 7, AR060: 5, AR061: 5, AR052: 5, AR033: 4, AR096: 4, AR053: 4, AR089: 3, AR104: 1 L0771: 4, L0766: 3, L0803: 3, L0789: 3, S0114: 1, H0341: 1, H0662: 1, S0354: 1, S0360: 1, S0046: 1, H0619: 1, H0393: 1, H0036: 1, H0590: 1, H0014: 1, L0761: 1, L0772: 1, L0764: 1, L0804: 1, L0774: 1, S3014: 1, L0748: 1 and L0779: 1.	7q22	126650, 126650, 154276, 173360, 173360, 602136, 602136, 602136, 602447	73-102, 2-25
1034	HTJAC60	882355	1044	78 – 1106	2449	Met-1 to Pro-6, Arg-14 to Thr-29, Thr-41 to Thr-48, Ser-50 to Leu-58, Glu-82 to Arg-90, Asn-185 to Lys-190, Gln-217 to Gln-222, Gln-237 to Gly-243,	AR053: 60, AR052: 54, AR096: 52, AR039: 28, AR089: 18, AR055: 16, AR033: 15, AR104: 11, AR060: 11, AR061: 10 H0253: 5, L0758: 3, S0444: 2, H0333: 2, H0510: 2, L0783: 2, S0406: 2,			134-156, 305-323, 271-287, 105-121, 166-182

1035	HMAIH15	882500	1045	105 - 734	2450	Gln-32 to Leu-40, Asn-177 to Trp-182.	AR096: 2, AR039: 2, AR033: 2, AR060: 2, AR053: 1, AR089: 1, AR061: 0, AR055: 0, AR052: 0, AR104: 0 S0278: 1	Lys-332 to Asp-343.	L0744: 2, L0754: 2, L0747: 2, L0749: 2, S0436: 2, H0422: 2, H0265: 1, H0717: 1, H0716: 1, S6024: 1, H0341: 1, H0484: 1, H0192: 1, S0360: 1, S0408: 1, T0008: 1, H0580: 1, H0393: 1, S0280: 1, H0196: 1, H0544: 1, H0545: 1, H0086: 1, H0009: 1, H0123: 1, H0620: 1, H0024: 1, S0362: 1, S0051: 1, H0188: 1, H0284: 1, H0428: 1, H0606: 1, H0135: 1, H0063: 1, H0487: 1, S0440: 1, L0768: 1, L0806: 1, L0653: 1, L0791: 1, L0666: 1, L0438: 1, H0672: 1, H0539: 1, S3014: 1, L0743: 1, L0752: 1, H0444: 1, H0423: 1 and H0677: 1.	186-210, 1-24, 76-102, 137-154, 38-56, 58-77, 156-172
1036	HTTDZ74	882514	1046	70 - 618	2451		AR033: 248, AR061: 210, AR060: 198, AR089: 122,			16-47, 61-84, 91-

| 1037 | HUSGC38 | 882527 | 1047 | 82 - 600 | 2452 | His-156 to Ile-172. | AR055: 54, AR053: 18, AR052: 18, AR096: 16, AR039: 14, AR104: 12 S0007: 2, H0040: 2, H0509: 2, L0369: 2, S0346: 1, S0049: 1, L0371: 1, L0774: 1, L0659: 1, L0664: 1 and L0741: 1. | AR033: 7, AR060: 4, AR052: 3, AR089: 3, AR096: 3, AR104: 2, AR055: 2, AR061: 2, AR053: 1 L0779: 10, H0547: 9, L0770: 7, L0659: 7, L0754: 7, S0010: 6, L0439: 6, L0740: 6, L0663: 5, H0013: 4, L0809: 4, H0539: 4, L0747: 4, L0756: 4, L0731: 4, L0759: 4, S0360: 3, H0156: 3, H0581: 3, H0090: 3, H0412: 3, H0494: 3, S0438: 3, L0774: 3, L0755: 3, L0757: 3, L0758: 3, S0434: 3, L0593: 3, H0542: 3, S0282: 2, S0356: 2, H0486: 2, S0049: 2, H0046: 2, L0471: 2, S0003: 2, H0428: 2, H0616: 2, T0042: 2, S0440: 2, S0150: 2, | 115, 6-22 | 130-153, 51-68, 24-44, 98-114, 3-19 |

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1038	HLHAN77	882559	1048	144 - 581	2453	Phe-17 to Asp-37, Thr-51 to Leu-67, Asn-70 to Thr-78.	AR096: 2, AR055: 1, AR053: 1, AR089: 1, AR060: 1, AR039: 0, AR052: 0, AR061: 0, AR033: 0 T0006: 2, L0439: 2, L0750: 2, L0785: 1, S0360: 1, S0222: 1, H0586: 1, L0622: 1, H0620: 1, H0024: 1, H0594: 1, H0606: 1, L0770: 1, L0771: 1, L0794: 1, L0649: 1, L0805: 1, L0653: 1, L0659: 1, L0791: 1, L0666: 1, L0753: 1 and L0758: 1.	L0803: 1, L0775: 1, L0375: 1, L0806: 1, L0805: 1, L0652: 1, L0653: 1, L0655: 1, L0792: 1, L0664: 1, H0144: 1, H0711: 1, H0684: 1, H0660: 1, H0672: 1, H0521: 1, H0696: 1, H0627: 1, L0742: 1, L0777: 1, L0752: 1, S0031: 1, S0436: 1, L0589: 1, L0591: 1, L0608: 1, L0594: 1, H0653: 1, H0667: 1, H0543: 1, H0423: 1 and S0424: 1. 76-108
1039	HFPKI70	882564	1049	107 -	2454	Arg-24 to His-31,	AR096: 8, AR055: 7,	29-50, 63-

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1040	HDRMD17	882582	1050	116 - 523	2455	Lys-68 to Gly-76.	AR053: 1, AR033: 1, AR104: 1, AR089: 1, AR060: 0, AR061: 0, AR096: 0, AR055: 0, AR052: 0, AR039: 0	17-40, 41-66, 102-118, 84-100
1041	HEMDM16	882648	1051	15 - 677	2456	Phe-10 to Lys-15.	AR089: 18, AR096: 17, AR060: 16, AR104: 13, AR033: 13, AR039: 12, AR052: 11, AR053: 9, AR055: 7, AR061: 5 L0759: 8, L0731: 7, H0521: 5, L0005: 4, S0358: 3, L0157: 3, L0757: 3, S0046: 2, H0494: 2, L0662: 2, L0740: 2, L0755: 2, H0657: 1, H0341: 1, H0663: 1, H0638: 1, S0376: 1, S0132: 1, H0549: 1, H0586: 1, H0590: 1, H0024: 1, H0071: 1, H0083: 1, H0252: 1, H0090: 1, H0591: 1,	162-178

| 1042 | HODGL52 | 882663 | 1052 | 62 - 517 | 2457 | Ser-120 to Ala-125, Glu-143 to Tyr-152. | AR089: 13, AR055: 11, AR060: 9, AR096: 8, AR033: 7, AR061: 7, AR053: 5, AR052: 5, AR039: 5, AR104: 2 H0046: 6, L0770: 6, H0402: 5, L0749: 5, L0731: 5, S0358: 4, L0771: 4, L0740: 4, H0617: 3, L0769: 3, L0783: 3, H0670: 3, L0747: 3, S0192: 3, S0476: 2, H0549: 2, H0581: 2, H0271: 2, H0328: 2, L0772: 2, L0532: 2, L0663: 2, L0438: 2, H0684: 2, H0539: 2, L0748: 2, L0439: 2, L0750: 2, L0757: 2, H0624: 1, L0785: 1, H0580: 1, S0046: 1, S0132: 1, H0351: 1, H0370: 1, H0455: 1, H0299: 1, H0586: 1, H0331: H0551: 1, H0059: 1, H0529: 1, L0389: 1, L0775: 1, L0776: 1, L0783: 1, L0665: 1, L0438: 1, H0547: 1, H0435: 1, S0378: 1, S0037: 1, L0439: 1, S0434: 1, L0596: 1, L0592: 1, L0604: 1, H0667: 1, H0543: 1 and H0422: 1. | 52-76, 86-106, 9-25, 29-45 |

1043	HSLGA24	882690	1053	83 – 490	2458	Pro-7 to Arg-12, Glu-18 to Ser-24, Ser-32 to Glu-38, Asp-103 to Arg-111.	1, H0485: 1, H0486: 1, T0082: 1, H0618: 1, H0253: 1, H0544: 1, H0546: 1, H0545: 1, H0620: 1, H0083: 1, H0266: 1, H0252: 1, H0615: 1, H0598: 1, H0163: 1, H0038: 1, H0040: 1, H0551: 1, H0059: 1, L0639: 1, L0667: 1, L0764: 1, L0662: 1, L0774: 1, L0775: 1, L0806: 1, L0805: 1, L0526: 1, L0809: 1, L0543: 1, L0647: 1, L0666: 1, L0665: 1, S0216: 1, S0374: 1, H0547: 1, H0519: 1, H0711: 1, H0658: 1, H0660: 1, S0152: 1, S0350: 1, H0696: 1, S0044: 1, S0406: 1, H0436: 1, S0037: 1, S0028: 1, L0743: 1, L0744: 1, L0759: 1 and S0436: 1. AR089: 13, AR096: 9, AR052: 7, AR053: 5, AR060: 5, AR033: 5, AR039: 4, AR104: 4, AR055: 3, AR061: 2 S0028: 1	112-136, 42-62
1044	HMHBT84	882784	1054	406 – 948	2459	Met-1 to Leu-6, Pro-13 to Ala-18,	AR055: 12, AR096: 8, AR060: 5, AR089: 5	19-38, 118-135,

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| 1045 | HHEDW60 | 882799 | 1055 | 107 - 433 | 2460 | H0052: 1, H0309: 1, H0545: 1, H0050: 1, L0471: 1, H0024: 1, L0183: 1, H0687: 1, H0286: 1, H0328: 1, L0483: 1, L0053: 1, H0628: 1, H0169: 1, H0674: 1, S0366: 1, H0038: 1, H0634: 1, H0488: 1, H0268: 1, T0041: 1, T0042: 1, H0494: 1, S0014: 1, H0625: 1, H0509: 1, H0641: 1, S0002: 1, H0529: 1, L0637: 1, L0646: 1, L0773: 1, L0662: 1, L0768: 1, L0652: 1, L0776: 1, L0659: 1, L0783: 1, S0374: 1, H0593: 1, S0126: 1, H0659: 1, H0658: 1, H0648: 1, H0672: 1, S3012: 1, S3014: 1, S0028: 1, L0754: 1, L0750: 1, L0731: 1, S0260: 1, S0436: 1, L0596: 1, L0581: 1, S0242: 1, S0194: 1, H0543: 1, H0506: 1 and H0008: 1. AR039: 39, AR053: 30, AR052: 26, AR033: 23, AR096: 21, AR104: 21, AR089: 17, AR060: 15, AR055: 13, AR061: 10 L0777: 7, L0747: 5, | 58-75 |

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1047	HARMS29	882813	1057	100 - 423	2462	Pro-29 to Pro-41.	H0038: 1, H0634: 1, H0551: 1, S0038: 1, H0633: 1, H0652: 1, S0428: 1, H0144: 1, H0666: 1, S0028: 1, L0749: 1, H0445: 1, L0596: 1, L0591: 1, L0608: 1 and H0667: 1.	AR096: 4, AR053: 3, AR039: 2, AR055: 2, AR089: 2, AR033: 2, AR061: 2, AR060: 2, AR052: 1, AR104: 1 H0592: 1, T0048: 1, L0770: 1 and L0756: 1.	53-74, 1-17
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					Glu-2 to Phe-18, Pro-20 to Leu-27.	AR060: 437, AR055: 303, AR061: 241, AR033: 235, AR104: 229, AR089: 173, AR039: 161, AR053: 108, AR052: 105, AR096: 64 L0659: 8, H0046: 7, L0752: 5, L0666: 4, H0549: 3, L0794: 3, L0758: 3, H0012: 2, L0763: 2, L0766: 2, L0647: 2, L0788: 2, S0192: 2, H0369: 1, H0618: 1, H0318: 1, H0596: 1, H0105: 1, H0015: 1, H0073: 1, H0510: 1, H0615: 1, H0622: 1, T0023: 1, H0598: 1, H0063: 1, H0494: 1, L0640: 1, L0631: 1, L0662: 1, L0805: 1, L0809: 1, L0787: 1, L0789: 1, L0532: 1, L0663: 1, L0664: 1, L0665: 1, H0689: 1, S0146: 1, H0478: 1, S3012: 1,	1, L0804: 1, L0775: 1, L0806: 1, L0659: 1, L0529: 1, L0663: 1, S0428: 1, H0689: 1, H0670: 1, H0648: 1, S0380: 1, L0749: 1, L0750: 1, L0756: 1, L0755: 1, L0758: 1, S0434: 1, S0194: 1 and H0423: 1.

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| 1068 | HWMBU89 | 883172 | 1078 | 149 - 652 | 2483 | | S0027: 1, L0439: 1, L0747: 1, L0750: 1, L0779: 1, L0780: 1, L0731: 1, S0276: 1 and H0352: 1. | AR052: 10, AR053: 8, AR033: 7, AR055: 7, AR089: 7, AR039: 7, AR060: 6, AR096: 5, AR104: 4, AR061: 4, L0771: 3, L0803: 3, L0748: 3, L0754: 3, S0376: 2, H0658: 2, L0743: 2, L0747: 2, L0777: 2, L0755: 2, H0707: 2, L0591: 2, H0686: 1, H0685: 1, S0358: 1, H0356: 1, H0494: 1, S0440: 1, H0641: 1, L0800: 1, L0774: 1, L0789: 1, H0684: 1, L0749: 1, L0601: 1 and L0603: 1. | | 9-32, 34-58 |
| 1069 | HSEBA38 | 883175 | 1079 | 41 - 991 | 2484 | Met-1 to Phe-10, Ala-76 to Asn-82, Gln-274 to Glu-280, Gln-288 to Arg-296. | AR053: 15, AR033: 12, AR052: 10, AR096: 10, AR060: 9, AR089: 8, AR104: 5, AR061: 5, AR039: 4, AR055: 3 | L0748: 12, H0436: 4, H0265: 3, H0556: 3, S0116: 3, H0581: 3, H0050: 3, H0199: 3, H0038: 3, H0634: | 22q11.2-qter | 82-99, 208-224, 134-150, 228-244 |

3, H0623: 3, H0641: 3,
H0521: 3, L0747: 3, H0543:
3, S0040: 2, H0580: 2,
H0592: 2, H0618: 2, S0474:
2, H0421: 2, H0510: 2,
H0644: 2, T0041: 2, L0439:
2, L0754: 2, L0759: 2,
S0031: 2, H0136: 2, H0583:
1, H0656: 1, H0255: 1,
S0356: 1, S0376: 1, H0393:
1, H0351: 1, H0549: 1,
H0431: 1, H0392: 1, H0409:
1, H0642: 1, H0559: 1,
T0109: 1, H0013: 1, H0069:
1, H0635: 1, H0253: 1,
H0318: 1, H0123: 1, H0047:
1, H0197: 1, H0024: 1,
S0051: 1, H0687: 1, H0290:
1, S0250: 1, H0328: 1,
H0031: 1, H0068: 1, H0376:
1, S0036: 1, H0163: 1,
H0591: 1, H0040: 1, H0616:
1, H0551: 1, H0413: 1,
H0560: 1, S0144: 1, H0529:
1, L0638: 1, H0144: 1,
H0703: 1, H0547: 1, S0126:
1, S0328: 1, H0539: 1,
H0522: 1, S3014: 1, L0745:
1, L0750: 1, L0756: 1,
L0752: 1, L0731: 1, L0591:

| 1070 | HEEAX26 | 883176 | 1080 | 281 - 1666 | 2485 | Gly-39 to Thr-44, Asn-51 to Thr-62, Pro-88 to Pro-104, Ser-109 to Ser-114. | AR096: 148, AR052: 102, AR089: 99, AR060: 78, AR053: 69, AR104: 35, AR039: 34, AR033: 33, AR061: 29, AR055: 11 L0748: 12, H0436: 4, H0265: 3, H0556: 3, S0116: 3, H0581: 3, H0050: 3, H0199: 3, H0038: 3, H0634: 3, H0623: 3, H0641: 3, H0521: 3, L0747: 3, H0543: 3, S0040: 2, H0580: 2, H0592: 2, H0618: 2, S0474: 2, H0421: 2, H0510: 2, H0644: 2, T0041: 2, L0439: 2, L0754: 2, L0759: 2, S0031: 2, H0136: 2, H0583: 1, H0656: 1, H0255: 1, S0356: 1, S0376: 1, H0393: 1, H0351: 1, H0549: 1, H0431: 1, H0392: 1, H0409: 1, H0642: 1, H0559: 1, T0109: 1, H0013: 1, H0069: 1, H0635: 1, H0253: 1, H0318: 1, H0123: 1, H0047: 1, H0197: 1, H0024: 1, S0051: 1, H0687: 1, H0290: 1, S0250: 1, H0328: 1, | 1, L0362: 1, S0011: 1, S0026: 1 and H0506: 1. | 257-274, 196-213, 61-77, 282-298 |

1071	HSXCV48	883211	1081	352 - 690	2486	Arg-63 to Arg-71.	H0031: 1, H0068: 1, H0376: 1, S0036: 1, H0163: 1, H0591: 1, H0040: 1, H0616: 1, H0551: 1, H0413: 1, H0560: 1, S0144: 1, H0529: 1, L0638: 1, H0144: 1, H0703: 1, H0547: 1, S0126: 1, S0328: 1, H0539: 1, H0522: 1, S3014: 1, L0745: 1, L0750: 1, L0756: 1, L0752: 1, L0731: 1, L0591: 1, L0362: 1, S0011: 1, S0026: 1 and H0506: 1. AR052: 2, AR089: 2, AR033: 1, AR096: 1, AR055: 1, AR104: 1, AR060: 1, AR061: 0, AR053: 0, AR039: 0, S0051: 5, L0666: 4, S0388: 3, L0438: 3, S0036: 2, L0774: 2, L0805: 2, H0593: 2, H0670: 2, L0748: 2, L0752: 2, S0434: 2, S6024: 1, H0294: 1, S0030: 1, S0442: 1, S0360: 1, H0406: 1, S0010: 1, L0040: 1, H0012: 1, H0620: 1, H0014: 1, S0048: 1, T0010: 1, H0673: 1, H0038: 1, H0494: 1, L0770: 1, L0769: 1,		1-22, 30-53, 70-92

1072	HTLAG19	883219	1082	107 - 1120	2487	Met-1 to Leu-6, Phe-48 to Gly-54, Cys-99 to Arg-104, Pro-258 to Ser-263, Arg-303 to Thr-309.	AR033: 7, AR055: 5, AR061: 4, AR060: 3, AR089: 3, AR053: 3, AR052: 3, AR096: 3, AR039: 2, AR104: 2 H0253: 11, L0439: 6, L0794: 5, L0809: 5, L0758: 4, H0618: 3, L0766: 3, L0803: 3, H0393: 2, L0783: 2, L0438: 2, H0341: 1, S0420: 1, S0358: 1, H0730: 1, S0474: 1, S0362: 1, H0510: 1, H0181: 1, L0769: 1, L0542: 1, L0789: 1, H0187: 1, L0743: 1, L0779: 1 and L0777: 1. L0662: 1, L0806: 1, L0783: 1, L0663: 1, L0664: 1, S0330: 1, H0478: 1, L0741: 1, L0779: 1 and S0031: 1.	189-212, 5-21
1073	HISBV17	883238	1083	10 - 594	2488		AR052: 4, AR053: 4, AR033: 3, AR039: 2, AR104: 2, AR089: 1, AR055: 1, AR061: 1, AR060: 1, AR096: 1	126-154, 169-190, 57-73, 87-103, 2-18
1074	HFKLN07	883248	1084	700 - 1323	2489	Arg-22 to Asn-32, Arg-59 to Phe-83, Glu-197 to Asp-203.	AR039: 26, AR104: 13, AR096: 12, AR033: 12, AR055: 12, AR053: 12,	120-138, 160-177

1075	HTLID36	883250	1085	22 - 420	2490	Thr-3 to Thr-11,				97-117
						AR039: 12, AR055: 11,	AR089: 11, AR052: 11, AR060: 9, AR061: 8 L0439: 7, H0620: 5, L0764: 4, H0424: 3, H0617: 3, L0659: 3, H0543: 3, H0333: 2, H0069: 2, H0618: 2, L0666: 2, L0438: 2, L0747: 2, L0756: 2, L0777: 2, L0757: 2, H0341: 1, H0661: 1, H0638: 1, S0222: 1, H0492: 1, H0270: 1, H0599: 1, H0036: 1, H0253: 1, H0318: 1, S0049: 1, H0052: 1, H0545: 1, H0023: 1, H0266: 1, S0250: 1, H0040: 1, H0623: 1, H0100: 1, T0042: 1, H0641: 1, S0002: 1, H0695: 1, L0638: 1, L0761: 1, L0646: 1, L0662: 1, L0766: 1, L0655: 1, L0783: 1, L0809: 1, L0664: 1, H0519: 1, H0682: 1, H0435: 1, H0658: 1, H0521: 1, H0436: 1, H0631: 1, L0779: 1, L0758: 1, L0593: 1, L0595: 1, L0601: 1, H0665: 1, H0667: 1, H0542: 1, H0423: 1, H0677: 1 and S0446: 1.			

No.	Clone	Acc.	SeqID NT	NT region	SeqID AA	Predicted features	Tissue distribution		Residue ranges
1076	HSLHV27	883287	1086	127 - 960	2491	Pro-51 to Gly-58.	AR053: 9, AR033: 8, AR089: 7, AR052: 7, AR060: 7, AR061: 5, AR096: 5, AR104: 4 H0618: 1 and H0038: 1.	AR060: 3, AR061: 1, AR033: 1, AR039: 1, AR104: 1, AR055: 1, AR096: 1, AR089: 1, AR053: 0, AR052: 0 S0028: 1	114-143, 255-278, 154-179, 34-61, 2-21, 85-101, 66-82, 233-249, 208-224
1077	HSLJG70	883295	1087	193 - 819	2492		AR089: 3, AR039: 3, AR060: 2, AR055: 2, AR053: 2, AR096: 2, AR061: 1, AR033: 1, AR104: 1 H0550: 1 and S0390: 1.		121-145, 143-166, 53-75, 2-28, 26-46, 94-110, 171-187
1078	HSFAK30	883301	1088	300 - 1052	2493	Thr-97 to Ile-105, Phe-111 to Tyr-116, Gly-139 to Thr-147, Leu-155 to Tyr-161, Thr-177 to Gln-189.	AR089: 14, AR053: 10, AR055: 9, AR033: 9, AR060: 9, AR052: 8, AR096: 7, AR061: 6, AR039: 4, AR104: 3 L0749: 4, L0770: 2, H0254: 1, H0662: 1, L0534: 1, L0562: 1, S0442: 1, H0154: 1, S0002: 1, L0385: 1		197-226, 10-26

| 1079 | HTTBM62 | 883307 | 1089 | 15 - 1493 | 2494 | 1, H0134: 1 and L0748: 1. AR061: 9, AR055: 8, AR033: 4, AR052: 4, AR060: 4, AR089: 3, AR053: 3, AR104: 2, AR096: 2, AR039: 1 H0046: 6, L0717: 2, L0770: 2, L0769: 2, L0666: 2, H0265: 1, H0556: 1, S0342: 1, H0346: 1, H0459: 1, S0418: 1, L0103: 1, S0300: 1, H0600: 1, H0587: 1, H0642: 1, H0331: 1, H0486: 1, H0069: 1, H0421: 1, H0597: 1, H0083: 1, L0052: 1, H0673: 1, H0040: 1, H0272: 1, H0529: 1, L0637: 1, L0653: 1, L0512: 1, L0659: 1, L0809: 1, H0547: 1, H0519: 1, H0593: 1, H0683: 1, S0378: 1, S0406: 1, H0555: 1, L0741: 1, L0747: 1, L0753: 1, S0031: 1, L0604: 1, S0011: 1 and S0424: 1. | 262-282, 100-116, 75-91 |
| 1080 | HFCDT23 | 883327 | 1090 | 74 - 394 | 2495 | AR053: 7, AR096: 5, AR089: 4, AR052: 4, AR060: 3, AR055: 3, AR033: 3, AR104: 3, | 75-107, 42-62, 1-18, 21-37, 66-82 |

1081	HDPGU86	883328	1091	400 - 789	2496			32-65, 1-19, 23-39
						AR061: 2, AR039: 0 S0152: 3, H0009: 2, H0135: 2, H0547: 2, L0439: 2, S0418: 1, S0354: 1, H0620: 1, H0264: 1, L0558: 1, H0519: 1, H0435: 1, H0539: 1, H0521: 1, L0751: 1, S0436: 1, S0192: 1 and H0506: 1.	AR096: 5, AR039: 4, AR104: 3, AR053: 3, AR052: 3, AR089: 2, AR055: 2, AR033: 2, AR061: 2, AR060: 1 L0766: 5, S0418: 4, H0135: 3, H0144: 3, S0152: 3, L0439: 3, L0777: 3, L0758: 3, H0009: 2, L0769: 2, L0771: 2, L0378: 2, L0663: 2, H0547: 2, L0740: 2, L0751: 2, S0436: 2, L0485: 2, H0556: 1, S0134: 1, H0657: 1, H0484: 1, S0420: 1, S0354: 1, L0717: 1, S0222: 1, H0270: 1, T0039: 1, L0021: 1, H0263: 1, H0620: 1, H0266: 1, H0687: 1, H0252: 1, H0604: 1, H0628: 1, H0617: 1, H0606: 1, H0264: 1, H0100:		

| 1082 | H2CBE07 | 883335 | 1092 | 598 - 1317 | 2497 | Lys-219 to Asn-232, Pro-235 to Ala-240. | AR104: 1, AR053: 1, AR089: 1, AR061: 1, AR060: 0, AR055: 0, AR052: 0, AR033: 0, AR096: 0, AR039: 0 S0003: 7, H0046: 6, L0766: 5, L0731: 5, L0794: 4, L0805: 4, L0804: 3, L0748: 3, L0747: 3, L0777: 3, L0758: 3, H0556: 2, S0418: 2, S0442: 2, H0333: 2, H0331: 2, H0253: 2, L0598: 2, L0803: 2, L0775: 2, L0776: 2, L0789: 2, L0602: 2, S3014: 2, L0439: 2, L0749: 2, L0753: 2, | 1, H0560: 1, H0561: 1, L0796: 1, L0639: 1, L0646: 1, L0764: 1, L0768: 1, L0794: 1, L0774: 1, L0776: 1, L0558: 1, L0783: 1, L0383: 1, L0519: 1, L0789: 1, L0793: 1, L0666: 1, L0438: 1, H0519: 1, H0435: 1, S0328: 1, H0539: 1, H0521: 1, H0696: 1, H0134: 1, L0747: 1, L0779: 1, L0752: 1, L0731: 1, L0593: 1, H0665: 1, S0192: 1 and H0506: 1. | 196-219, 66-85, 25-47, 148-166, 121-138, 166-182 |

1083	HFIHS04	883358	1093	42 - 755	2498		84-112, 39-66, 196-212, 157-175, 5-21
					Pro-30 to Ser-38, Gly-69 to Leu-79, Thr-147 to Gly-158, Tyr-220 to Glu-238.	L0608: 2, L0362: 2, S0040: 1, S0218: 1, H0583: 1, H0650: 1, H0656: 1, L0415: 1, H0720: 1, H0638: 1, S0354: 1, H0580: 1, H0250: 1, H0599: 1, H0618: 1, H0309: 1, T0110: 1, H0178: 1, H0123: 1, H0024: 1, H0428: 1, T0023: 1, L0483: 1, H0628: 1, H0316: 1, T0067: 1, H0488: 1, S0344: 1, H0538: 1, UNKWN: 1, L0770: 1, L0769: 1, L0637: 1, L0764: 1, L0768: 1, L0375: 1, L0651: 1, L0806: 1, L0655: 1, L0659: 1, L0809: 1, L0663: 1, L0665: 1, H0725: 1, S0328: 1, H0539: 1, H0521: 1, H0436: 1, S3012: 1, L0779: 1, L0757: 1, S0308: 1, L0591: 1, L0599: 1, H0668: 1 and H0422: 1. AR096: 7, AR089: 4, AR061: 4, AR060: 3, AR033: 3, AR052: 3, AR104: 3, AR039: 2, AR055: 1, AR053: 1 L0748: 5, S0276: 3, S0410: 2, H0012: 2, H0024: 2,	

1084	HTXLP33	883359	1094	67 - 486	2499	Gln-55 to Asn-65.	H0521: 2, L0439: 2, H0662: 1, S0420: 1, S0358: 1, S0132: 1, H0431: 1, H0586: 1, H0486: 1, H0013: 1, H0575: 1, H0090: 1, S0438: 1, H0509: 1, L0518: 1, H0539: 1, S0434: 1, S0242: 1 and S0194: 1. AR055: 7, AR053: 7, AR052: 6, AR033: 5, AR096: 4, AR039: 4, AR089: 4, AR061: 4, AR060: 3, AR104: 2 S0328: 4, H0556: 3, L0438: 2, L0742: 2, L0777: 2, H0170: 1, H0083: 1, H0598: 1, H0616: 1, L0770: 1, L0766: 1, L0655: 1, L0779: 1, H0445: 1 and L0608: 1.	110-129
1085	HMEKG76	883364	1095	265 - 1125	2500	Glu-2 to Arg-10, Lys-18 to Lys-28, His-76 to Gly-84, Ser-101 to Gln-116, Asp-194 to Glu-199, Pro-239 to Ala-245, Asp-257 to Ser-272.	AR033: 7, AR055: 5, AR052: 5, AR053: 5, AR089: 4, AR060: 4, AR061: 3, AR096: 3, AR104: 3, AR039: 0 H0618: 6, L0769: 5, L0794: 5, L0439: 5, L0747: 5, L0766: 4, L0803: 4, S3014: 4, L0748: 4, L0758:	123-139, 152-168

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1086	HTENG02	883375	1096	110 - 607	2501	Tyr-92 to Glu-97.	AR055: 7, AR061: 5, AR033: 4, AR060: 4, AR052: 3, AR089: 3, AR053: 3, AR096: 3, AR104: 1, AR039: 1 H0009: 2, H0031: 2, L0596: 2, H0295: 1, H0341: 1, H0483: 1, S0358: 1, S0410: 1, H0497: 1, H0616: 1, S0440: 1, L0800: 1, L0794: 1, L0649: 1, L0803: 1, L0657: 1, L0791: 1, S0152: 1, L0779: 1, S0436: 1 and H0542: 1.	32-64, 71-89, 98-115
1087	HTOAW80	883376	1097	285 - 1244	2502	Asn-82 to Tyr-87.	AR053: 9, AR096: 7, AR052: 7, AR089: 5, AR055: 4, AR039: 3, AR060: 3, AR104: 3, AR033: 2, AR061: 2 H0506: 4, S0434: 2 and H0264: 1.	13-46, 245-273, 50-73, 205-234, 180-199, 98-114
1088	HAJAW57	883401	1098	47 - 1036	2503	Arg-6 to Gly-28, Lys-35 to His-47, Glu-50 to Lys-63, Leu-65 to Asn-86, Arg-93 to Asn-109, Ser-116 to Asp-136.	AR096: 13, AR033: 12, AR052: 11, AR053: 11, AR089: 10, AR104: 10, AR060: 7, AR039: 4, AR055: 2, AR061: 2 L0754: 15, L0748: 14, L0439: 9, H0543: 9, L0766: 7, L0747: 7, L0779: 7,	238-258, 262-280

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L0665: 5, L0438: 5, L0749: 5, H0423: 5, S0474: 4,
H0014: 4, H0038: 4, L0659: 4, H0436: 4, L0777: 4,
L0731: 4, H0445: 4, L0362: 4, H0657: 3, S0116: 3,
S0360: 3, S0222: 3, H0486: 3, H0052: 3, H0046: 3,
L0483: 3, L0142: 3, H0551: 3, S0440: 3, S0002: 3,
L0369: 3, L0803: 3, L0805: 3, L0776: 3, L0655: 3,
L0527: 3, L0666: 3, S0374: 3, S0126: 3, H0710: 3,
S0028: 3, L0740: 3, L0750: 3, L0589: 3, L0599: 3,
L0415: 2, H0661: 2, H0306: 2, S0354: 2, S0358: 2,
S0476: 2, H0619: 2, H0574: 2, H0013: 2, S0346: 2,
S0003: 2, H0039: 2, H0674: 2, H0090: 2, L0564: 2,
S0422: 2, L0769: 2, L0662: 2, L0775: 2, L0653: 2,
H0144: 2, H0547: 2, S0328: 2, L0602: 2, H0521: 2,
H0696: 2, S0406: 2, S3014: 2, L0759: 2, H0595: 2,

S0436: 2, L0596: 2, L0588: 2, L0591: 2, L0592: 2, L0581: 2, H0395: 1, H0556: 1, H0685: 1, H0713: 1, H0717: 1, H0716: 1, S0134: 1, H0583: 1, H0650: 1, H0656: 1, L0785: 1, H0341: 1, S0282: 1, H0346: 1, H0664: 1, H0662: 1, H0402: 1, H0305: 1, H0589: 1, S0418: 1, S0420: 1, S0356: 1, S0442: 1, S0376: 1, H0580: 1, S0046: 1, H0393: 1, S6016: 1, H0455: 1, H0586: 1, H0587: 1, H0497: 1, T0040: 1, H0427: 1, S0280: 1, H0156: 1, L0021: 1, S0010: 1, H0318: 1, H0581: 1, H0421: 1, S0049: 1, H0596: 1, H0546: 1, H0009: 1, H0572: 1, L0471: 1, S0388: 1, T0010: 1, H0083: 1, H0630: 1, H0375: 1, S0250: 1, H0252: 1, H0328: 1, H0615: 1, H0428: 1, H0213: 1, H0031: 1, H0553: 1, H0628: 1, H0673: 1, H0400: 1, S0036: 1, H0163: 1, H0616: 1, T0041: 1, H0561: 1, S0382: 1,

1089	HTEHF89	883419	1099	698 – 3	2504			148-180, 90-109, 191-207, 58-76
					Pro-35 to Cys-46, Pro-48 to Glu-54, Tyr-79 to Ser-85.	S0306: 1, S0438: 1, H0509: 1, S0344: 1, H0538: 1, H0529: 1, L0506: 1, L0371: 1, L0637: 1, L0667: 1, L0630: 1, L0764: 1, L0773: 1, L0768: 1, L0364: 1, L5574: 1, L0804: 1, L0774: 1, L0784: 1, L0378: 1, L0806: 1, L0606: 1, L0809: 1, L0791: 1, L0793: 1, L0663: 1, S0052: 1, S0216: 1, H0435: 1, H0658: 1, H0670: 1, H0648: 1, H0672: 1, H0522: 1, S0146: 1, S0027: 1, S0032: 1, L0741: 1, L0744: 1, L0751: 1, L0752: 1, L0753: 1, L0755: 1, L0757: 1, S0031: 1, L0608: 1, L0361: 1, S0026: 1, H0665: 1, S0242: 1, S0276: 1, H0542: 1, H0422: 1, L0462: 1 and H0352: 1. AR096: 1, AR104: 1, AR060: 1, AR033: 1, AR055: 1, AR089: 1, AR039: 0, AR053: 0, AR061: 0, AR052: 0 H0046: 9, H0038: 2, H0170: 1, H0455: 1, H0486: 1, H0013: 1, S0010: 1,	

| 1090 | HSYBB84 | 883420 | 1100 | 88 - 567 | 2505 | Pro-29 to Cys-40, Pro-42 to Glu-48, Tyr-73 to Ser-79. | AR096: 7, AR033: 5, AR052: 5, AR089: 5, AR060: 4, AR104: 4, AR039: 4, AR053: 4, AR061: 1, AR055: 1 L0439: 11, H0046: 9, L0766: 6, L0777: 5, L0759: 5, L0438: 4, L0740: 4, H0486: 3, L0659: 3, H0539: 3, L0750: 3, S0358: 2, S6028: 2, H0688: 2, H0553: 2, H0038: 2, H0551: 2, L0666: 2, H0547: 2, L0752: 2, L0758: 2, S0434: 2, H0170: 1, H0740: 1, H0638: 1, S0444: 1, S0360: 1, H0455: 1, H0013: 1, H0156: 1, H0575: 1, S0010: 1, H0052: 1, H0327: 1, S0250: 1, S0214: 1, H0328: 1, H0428: 1, H0040: 1, H0268: 1, L0435: 1, H0560: 1, S0352: 1, L0769: 1, L0646: 1, L0662: 1, L0774: 1, L0775: 1, L0776: 1, L0655: | H0052: 1, H0327: 1, S6028: 1, S0214: 1, H0328: 1, H0040: 1, H0551: 1, H0268: 1, H0560: 1, H0520: 1 and H0519: 1. | 84-103, 52-70 |

1091	HTJMD30	883430	1101	135 - 632	2506		
					Asn-6 to Gln-38, Gly-41 to Arg-49, Gln-57 to Gln-65, Gln-68 to Thr-74, Ala-76 to Leu-92.	1, L0663: 1, L0664: 1, L0665: 1, H0144: 1, S0374: 1, H0520: 1, H0519: 1, H0659: 1, S0330: 1, S0406: 1, S0028: 1, L0749: 1, L0753: 1, H0668: 1, S0026: 1 and H0667: 1. AR052: 2, AR061: 1, AR089: 1, AR104: 1, AR053: 1, AR033: 1, AR060: 1, AR096: 0, AR055: 0, AR039: 0 H0494: 4, H0521: 3, S3014: 3, S0354: 2, S0476: 2, H0083: 2, H0252: 2, H0644: 2, S0126: 2, S0152: 2, S0027: 2, S0028: 2, S0011: 2, H0543: 2, H0556: 1, S0040: 1, H0341: 1, S0282: 1, H0638: 1, S0442: 1, H0580: 1, H0393: 1, S0278: 1, H0437: 1, H0431: 1, H0497: 1, T0040: 1, T0114: 1, H0156: 1, H0097: 1, H0599: 1, H0024: 1, H0051: 1, H0355: 1, H0266: 1, H0031: 1, H0163: 1, H0634: 1, H0551: 1, H0264: 1, H0488: 1, H0268: 1, H0412: 1, H0056: 1, H0623:	126-143, 148-164

| 1092 | HELFG05 | 883434 | 1102 | 1721 - 1296 | 2507 | Pro-2 to Glu-8, Thr-26 to Asp-32, Pro-70 to Arg-77, Ser-89 to Thr-95. | AR104: 1, AR052: 1, AR055: 1, AR033: 1, AR061: 1, AR039: 0, AR089: 0, AR053: 0, AR060: 0, AR096: 0 L0794: 10, L0809: 9, L0750: 9, L0791: 7, L0747: 7, L0758: 6, L0759: 6, H0620: 5, L0749: 5, S0358: 4, H0135: 4, L0769: 4, L0800: 4, L0805: 4, L0659: 4, H0556: 3, L0471: 3, H0040: 3, L0804: 3, S0360: 2, H0393: 2, H0550: 2, H0592: 2, H0333: 2, S0049: 2, H0124: 2, S0438: 2, L0771: 2, L0662: 2, L0803: 2, L4501: 2, H0547: 2, L0779: 2, L0755: 2, L0731: 2, S0434: 2, L0603: 2, H0506: 2, H0713: 1, H0717: 1, H0294: 1, H0662: 1, H0729: 1, S0045: 1, H0607: 1, H0586: 1, H0587: 1, T0040: 1, S0280: 1, H0590: 1, H0561: 1, H0547: 1, H0519: 1, H0593: 1, H0539: 1, H0134: 1, H0436: 1, S3012: 1, H0445: 1, L0593: 1 and H0422: 1. | 126-142 |

1093	HHEHG38	883493	1103	88 - 1722	2508		
					Gly-6 to Leu-13, Lys-15 to His-20, Ile-70 to Lys-76, Tyr-145 to Thr-150, Ser-223 to Met-228, Gly-252 to Gly-258, Glu-339 to Tyr-351, Leu-379 to Ile-387, Lys-394 to Thr-404.	1, S0010: 1, H0581: 1, H0251: 1, H0041: 1, H0565: 1, H0570: 1, H0123: 1, H0081: 1, H0050: 1, H0188: 1, H0039: 1, H0622: 1, H0038: 1, H0063: 1, H0412: 1, H0413: 1, S0440: 1, S0210: 1, S0002: 1, L0763: 1, L0770: 1, L0761: 1, L0641: 1, L0768: 1, L0766: 1, L0375: 1, L0806: 1, L0776: 1, L0789: 1, L0790: 1, L0666: 1, L0663: 1, L0665: 1, H0520: 1, H0660: 1, H0672: 1, H0539: 1, S0380: 1, H0521: 1, H0696: 1, H0555: 1, L0744: 1, L0748: 1, L0780: 1, L0757: 1, H0445: 1, L0584: 1, L0589: 1, S0242: 1, S0194: 1, H0008: 1 and H0352: 1. AR039: 7, AR061: 6, AR104: 5, AR053: 5, AR096: 5, AR033: 5, AR052: 5, AR055: 4, AR089: 4, AR060: 4 L0779: 1, L0777: 1 and H0542: 1.	93-110, 405-421, 189-205, 444-460, 22-38, 231-247

1094	HSLDT25	883540	1104	50 - 679	2509		AR052: 18, AR033: 13, AR096: 12, AR089: 12, AR053: 10, AR060: 7, AR061: 6, AR104: 6, AR055: 6, AR039: 5, S0028: 1	11-38, 59-82, 89-118, 115-138, 145-163
1095	HSDGH19	883575	1105	374 - 697	2510	Pro-5 to Lys-11, Ala-21 to Ser-26, Asp-50 to Thr-56, Cys-90 to Ile-96, Val-103 to Gln-108.	AR096: 25, AR039: 22, AR104: 19, AR089: 18, AR053: 17, AR033: 16, AR052: 14, AR060: 14, AR055: 12, AR061: 7 H0521: 2, S0031: 2, H0305: 1, H0619: 1, H0635: 1, H0318: 1, H0309: 1, H0090: 1, H0059: 1, S0002: 1, H0435: 1 and L0740: 1.	67-90, 31-47
1096	HCEOU19	883591	1106	2 - 373	2511	Asp-21 to Cys-41, Pro-43 to Leu-51, Ala-111 to Trp-118.	AR089: 5, AR053: 5, AR060: 4, AR096: 4, AR033: 3, AR039: 2, AR055: 2, AR061: 2, AR104: 2, AR052: 1 L0751: 4, L0803: 3, H0052: 2, H0125: 1, S0442: 1, H0009: 1, S0003: 1, L0055: 1, L0662: 1, L0774: 1, L0659: 1, L0789: 1, H0214: 1, L0749: 1 and L0605: 1.	72-106, 1-20
1097	HBIMF04	883607	1107	126 -	2512	Met-1 to His-10,	AR053: 4, AR052: 3,	287-303,

1253	Leu-51 to Leu-60, Ser-84 to Val-91, Pro-222 to Asp-227, Glu-229 to Leu-236.	AR055: 3, AR033: 3, AR096: 3, AR089: 3, AR104: 3, AR060: 2, AR039: 2, AR061: 2 H0457: 11, L0766: 8, H0436: 5, L0747: 4, H0486: 3, H0620: 3, H0520: 3, H0341: 2, H0255: 2, H0402: 2, S0358: 2, H0581: 2, H0024: 2, H0405: 2, H0617: 2, L0761: 2, L0662: 2, L0768: 2, L0803: 2, L0776: 2, L0663: 2, H0691: 2, H0547: 2, H0555: 2, L0742: 2, L0779: 2, L0731: 2, H0543: 2, H0265: 1, H0584: 1, H0583: 1, H0650: 1, H0657: 1, H0656: 1, H0484: 1, H0125: 1, S0360: 1, H0549: 1, H0550: 1, H0613: 1, H0600: 1, H0592: 1, H0069: 1, H0618: 1, H0253: 1, H0318: 1, L0738: 1, H0544: 1, H0546: 1, H0009: 1, H0594: 1, H0266: 1, H0179: 1, H0271: 1, H0622: 1, H0606: 1, H0135: 1, H0040: 1, H0488: 1, H0494: 1, H0560: 1, S0372: 1, S0002: 1, H0695: 1, L0769:	142-158, 331-347

1098	HSKZE56	883619	1108	30 - 1079	2513	AR055: 17, AR033: 9, AR052: 8, AR061: 8, AR060: 7, AR089: 6, AR096: 6, AR104: 6, AR053: 5, AR039: 4 L0749: 6, S0356: 4, S0474: 4, L0748: 4, L0617: 3, S0126: 3, L0754: 3, L0588: 3, S0212: 2, S0045: 2, H0266: 2, H0170: 1, H0265: 1, H0419: 1, H0580: 1, S0046: 1, S0278: 1, S0280: 1, H0156: 1, H0575: 1, H0581: 1, H0123: 1, H0553: 1, L0142: 1, H0090: 1, H0063: 1, H0433: 1, H0641: 1, S0142: 1, L0644: 1, L0764: 1, L0650: 1, L0632: 1, L0787: 1, L0666: 1, H0725: 1, H0539: 1, H0521:	164-180, 271-287, 77-93

1, L0639: 1, L0772: 1, L0643: 1, L0645: 1, L0773: 1, L0775: 1, L0806: 1, L0655: 1, L0659: 1, L0809: 1, L0790: 1, L0665: 1, H0593: 1, H0435: 1, S0328: 1, H0694: 1, H0134: 1, S0406: 1, L0741: 1, L0744: 1, L0748: 1, L0758: 1, H0667: 1 and H0506: 1.

1099	HLJBD90	883638	1109	731 - 1324	2514	Ala-2 to Tyr-20.	1, S3014: 1, S0027: 1, L0740: 1, L0756: 1, L0731: 1, L0759: 1, L0605: 1, H0665: 1, H0667: 1 and H0543: 1. AR055: 2, AR052: 2, AR053: 2, AR033: 2, AR096: 2, AR039: 2, AR060: 1, AR061: 1, AR089: 1, AR104: 0	130-161
1100	HAUAX28	883675	1110	515 - 967	2515	Phe-85 to Gly-96, Glu-133 to Thr-143.	AR055: 16, AR039: 14, AR053: 11, AR033: 10, AR052: 10, AR060: 10, AR089: 9, AR104: 9, AR096: 8, AR061: 8, L0509: 10, L0766: 6, L0504: 5, L0775: 4, L0499: 3, L0493: 3, L0515: 3, L0511: 3, L0809: 3, L0747: 3, L0502: 2, L0500: 2, L0771: 2, L0510: 2, L0512: 2, L0748: 2, L0439: 2, L0751: 2, L0779: 2, L0752: 2, L0731: 2, L0759: 2, L0593: 2, H0294: 1, H0125: 1, S0418: 1, S0420: 1, L0005: 1, S0358: 1, S0444: 1, S0045: 1, H0549: 1,	96-115, 67-83, 12-28

| 1101 | HUCPU88 | 883702 | 1111 | 923 - 3 | 2516 | Lys-8 to Arg-18. | H0438: 1, H0559: 1, H0486: 1, H0318: 1, S0049: 1, L0471: 1, H0083: 1, S6028: 1, H0376: 1, H0090: 1, H0509: 1, H0529: 1, L0506: 1, L0763: 1, L0772: 1, L0764: 1, L0662: 1, L0774: 1, L0438: 1, H0689: 1, H0684: 1, H0658: 1, H0670: 1, H0660: 1, H0696: 1, S0044: 1, H0134: 1, L0740: 1, L0749: 1, L0755: 1, H0543: 1 and H0422: 1. | AR039: 53, AR053: 31, AR033: 23, AR052: 22, AR089: 20, AR055: 16, AR104: 15, AR096: 14, AR060: 13, AR061: 10 S0420: 1 | 19p13.3 | 108725, 120700, 133171, 136836, 145981, 147141, 164953, 188070, 600957, 601238, 601846, 602216, 602477 | 279-301 |
| 1102 | HFXKJ22 | 883713 | 1112 | 22 - 438 | 2517 | | | AR096: 5, AR053: 5, AR089: 4, AR052: 4, AR060: 3, AR033: 2, | | | 20-42, 108-127, 1-18, 58- |

						Amino acid features	AR listing	Cytogenetic	Position numbers	
							AR055: 2, AR039: 1, AR104: 1, AR061: 1 S0282: 2 and H0352: 1.			74
1103	HWHPD05	883740	1113	133 - 1566	2518	Pro-44 to Lys-55, Pro-72 to Ser-79, His-138 to Lys-145, Leu-150 to Asp-155, Leu-164 to Val-170, Thr-173 to Gly-182, Gly-194 to Lys-204, Pro-233 to Gln-241, Pro-243 to Ala-255, Ser-469 to Asp-478.	AR096: 1, AR033: 1, AR104: 1, AR089: 1, AR060: 1, AR061: 0, AR052: 0, AR053: 0, AR039: 0 L0439: 3, H0587: 1 and H0560: 1.			360-382, 215-231, 341-357
1104	HFRAN15	883797	1114	703 - 1347	2519	Tyr-86 to Pro-93, Pro-143 to Ala-151, Leu-178 to Arg-189.	AR096: 4, AR060: 3, AR089: 3, AR053: 2, AR055: 2, AR061: 2, AR033: 2, AR104: 1, AR052: 1, AR039: 0 H0617: 2 and S0050: 1.			16-39, 64-85, 41-60, 99-115, 150-166
1105	HHGCV39	883848	1115	40 - 390	2520		AR052: 24, AR055: 19, AR053: 17, AR096: 17, AR060: 16, AR033: 15, AR104: 15, AR089: 13, AR061: 11, AR039: 8 L0759: 6, L0769: 5, H0052: 4, L0770: 4, L0809: 4, L0439: 4, L0752: 4, S0408: 3, L0751: 3, L0747: 3, L0779: 3, S0007: 2,	19q13.1-q13.2	107741, 113900, 122720, 122720, 126340, 126391, 160900, 164731, 172400, 172400,	71-93, 15-31

| 1106 | HMAFM80 | 883887 | 1116 | 279-758 | 2521 | Met-40 to Thr-47. | AR033: 2, AR089: 2, AR052: 2, AR060: 2, AR061: 2, AR055: 1, H0351: 2, H0333: 2, H0427: 2, H0581: 2, L0662: 2, L0649: 2, L0774: 2, L0806: 2, L0666: 2, L0741: 2, L0777: 2, H0543: 2, H0739: 1, H0171: 1, H0254: 1, H0125: 1, H0675: 1, H0722: 1, H0733: 1, S0140: 1, H0261: 1, H0592: 1, H0586: 1, H0587: 1, H0257: 1, H0486: 1, L0022: 1, H0042: 1, H0150: 1, H0086: 1, H0123: 1, T0010: 1, H0266: 1, H0673: 1, S0364: 1, H0063: 1, H0087: 1, H0494: 1, H0560: 1, H0538: 1, L0761: 1, L0772: 1, L0646: 1, L0765: 1, L0766: 1, L0805: 1, L0776: 1, L0807: 1, L0657: 1, L0783: 1, H0547: 1, S0126: 1, H0435: 1, S0330: 1, H0521: 1, H0522: 1, L0743: 1, L0749: 1, L0750: 1, L0786: 1, L0753: 1, L0755: 1, L0731: 1, L0758: 1, S0436: 1, S0011: 1 and S0192: 1. | 173850, 180901, 180901, 207750, 221770, 248600, 258501, 600918, 602716 | 44-73, 88-110, 10-26, 109- |

1107	HAPOW71	883889	1117	682 - 1392	2522			125
					Glu-12 to Gln-18, Thr-41 to Asn-51, Lys-96 to Ser-104, Arg-176 to Ser-186, Ile-200 to Asn-205, Ser-224 to Ser-231.	AR060: 9, AR096: 8, AR061: 5, AR033: 4, AR055: 4, AR089: 2, AR052: 2, AR104: 1, AR053: 0, AR039: 0 L0770: 5, L0662: 4, L0731: 4, H0624: 3, H0486: 3, L0750: 3, L0599: 3, H0713: 2, H0050: 2, H0615:	AR096: 1, AR053: 0, AR104: 0, AR039: 0 H0457: 3, L0776: 3, H0253: 2, L0769: 2, L0766: 2, S0044: 2, L0731: 2, L0605: 2, H0556: 1, H0449: 1, S0360: 1, H0393: 1, H0586: 1, L0622: 1, H0156: 1, H0706: 1, T0048: 1, H0318: 1, H0052: 1, H0545: 1, H0563: 1, H0081: 1, S0250: 1, H0135: 1, H0038: 1, H0494: 1, S0144: 1, S0344: 1, S0002: 1, L0369: 1, L0762: 1, L0662: 1, L0549: 1, L0653: 1, L0807: 1, L0519: 1, L0666: 1, L0665: 1, H0521: 1, S3014: 1, S0027: 1, L0779: 1, L0758: 1, L0593: 1, H0668: 1 and S0398: 1.	58-90, 134-159, 19-39, 111-127

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1108 HBCBW64 883947 1118 563 - 78 2523

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AR033: 5, AR089: 3, AR060: 2, AR061: 2, AR096: 1, AR052: 1, AR055: 1, AR053: 1, AR104: 0, AR039: 0 H0618: 7, H0424: 6, L0758: 6, L0777: 5, H0556: 4, H0370: 2, H0013: 2, H0253: 2, H0038: 2, H0616: 2, L0800: 2, L0776: 2, L0665: 2, S0126: 2, H0672: 2, L0602: 2, L0439: 2, L0752: 2, L0731: 2, L0595:

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1109	HBING74	883950	1119	639 - 1637	2524				222-240
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1110	HBIMJ94	883951	76 - 1824	1120	2525		H0422: 1.	22q13.33	532-558, 36-52, 502-518
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1111	HNFCI36	884007	1121	65 - 961	2526	Gly-5 to Gln-12, Arg-34 to Gly-39, Gly-76 to Gly-81, Glu-86 to Ile-93, Phe-97 to Ala-104.	1, H0617: 1, H0674: 1, S0366: 1, S0036: 1, H0135: 1, H0040: 1, H0087: 1, S0038: 1, T0041: 1, S0464: 1, S0440: 1, H0652: 1, L0598: 1, H0529: 1, L0369: 1, L0770: 1, L0639: 1, L0637: 1, L0764: 1, L0773: 1, L4556: 1, L0775: 1, L0805: 1, L0776: 1, L0661: 1, L0657: 1, L0659: 1, L0542: 1, L0384: 1, L0809: 1, L4501: 1, L0666: 1, H0593: 1, S0126: 1, S0330: 1, H0521: 1, H0522: 1, H0555: 1, H0187: 1, S3012: 1, S0028: 1, L0745: 1, L0757: 1, S0194: 1 and H0423: 1. AR104:1085, AR061: 495, AR033: 395, AR060: 388, AR096: 310, AR039: 307, AR055: 297, AR089: 211, AR053: 141, AR052: 130 H0250: 2, L0639: 2, H0590: 1, H0421: 1, H0246: 1, H0373: 1, H0071: 1, H0271: 1, H0646: 1, L0655: 1, L0790: 1, L0664: 1, L0745: 1 and L0581: 1.	13-32, 227-244, 119-135, 208-224

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1112	HAFAH26	884076	1122	43 - 1053	2527		AR033: 7, AR060: 5, AR061: 5, AR055: 5, AR089: 4, AR052: 3, AR053: 3, AR096: 2, AR039: 2, AR104: 1 H0643: 2, L0803: 2, S0452: 2, T0049: 1, H0580: 1, H0013: 1, H0156: 1, H0581: 1, H0179: 1, H0271: 1, H0040: 1, S0422: 1, L0369: 1, L0766: 1, L0655: 1, L0607: 1, L0791: 1, H0693: 1, H0670: 1, S0380: 1, H0579: 1, L0777: 1, L0752: 1, S0011: 1 and H0653: 1.	27-64, 22-39, 133-149, 186-202, 218-234
1113	HE8MV45	884379	1123	164 - 775	2528	Gln-109 to Gln-115, Gln-149 to Ala-154.	AR052: 6, AR055: 4, AR053: 4, AR060: 3, AR033: 3, AR096: 2, AR039: 2, AR089: 2, AR061: 2, AR104: 2	8-27, 74-90
1114	HUKEQ96	884532	1124	865 - 563	2529	Arg-49 to Ala-55.	AR033: 19, AR104: 18, AR055: 15, AR060: 10, AR052: 9, AR061: 9, AR089: 8, AR053: 8, AR096: 8, AR039: 4 L0439: 58, L0438: 21, H0556: 7, H0052: 7, L0771:	73-89, 1-17

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1116	HSLEN72	884818	1126	79 - 435	2531	1, S0330: 1, H0539: 1, H0522: 1, S0406: 1, H0555: 1, L0756: 1, L0777: 1, L0731: 1, L0759: 1, S0434: 1, S0436: 1, S0192: 1, H0542: 1 and S0458: 1. AR052: 2, AR089: 1, AR104: 1, AR060: 1, AR033: 0, AR096: 0, AR061: 0, AR055: 0, AR039: 0, AR053: 0 S0028: 4, S0031: 3, H0617: 2, S0150: 2, H0381: 1, S0001: 1, S0282: 1, S0045: 1, S0222: 1, S0005: 1, H0331: 1, L0105: 1, S0050: 1, S0051: 1, H0271: 1, H0165: 1, H0056: 1, S0428: 1, S0053: 1 and S0194: 1.			24-58, 95-119, 5-21
1117	HTXDM64	885098	1127	1274 - 789	2532	Lys-10 to Arg-17, Glu-31 to Ser-37, Thr-62 to Phe-70, Ser-83 to Gly-93. AR055: 11, AR053: 8, AR060: 8, AR089: 7, AR096: 7, AR052: 6, AR061: 5, AR104: 5, AR039: 5, AR033: 5 H0305: 6, H0556: 3, L0599: 2, H0265: 1, S0134: 1, S0212: 1, H0632: 1, H0383: 1, L0664: 1, S0152:			98-126, 39-61

1118	HAGDJ72	885264	1128	185 - 505	2533	Met-1 to Ser-8, Val-31 to Gly-36, Ser-73 to Ala-83, Ser-97 to Phe-102.	1, L0748: 1 and L0753: 1. AR055: 10, AR033: 5, AR060: 4, AR053: 4, AR061: 4, AR052: 3, AR089: 2, AR096: 2, AR104: 2, AR039: 1 S0010: 1, L0438: 1, H0659: 1 and L0439: 1.	37-70
1119	HTPHK88	885476	1129	438 - 908	2534	Lys-26 to Glu-49, Lys-121 to Leu-131.	AR055: 9, AR060: 6, AR089: 5, AR033: 4, AR052: 4, AR053: 4, AR061: 4, AR104: 2, AR096: 2, AR039: 2 H0622: 1, H0509: 1, H0144: 1, S0126: 1, L0750: 1 and L0759: 1.	1-27, 52-68
1120	HDPFA53	885596	1130	1038 - 1	2535	Gln-12 to Asp-18.	AR096: 9, AR060: 6, AR089: 5, AR104: 5, AR033: 4, AR039: 4, AR052: 4, AR055: 3, AR061: 2, AR053: 2 L0770: 5, L0751: 4, H0040: 3, L0766: 3, L0758: 3, S0358: 2, H0619: 2, H0266: 2, S0003: 2, H0553: 2, H0056: 2, L0775: 2, L0655: 2, L0665: 2, H0690: 2, H0696: 2, L0748: 2, L0754: 2, L0745: 2, L0777:	295-326, 279-301

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1122	HSXAD12	886222	1132	341 - 793	2537	Pro-111 to Gly-116, Ala-130 to Trp-142.	AR055: 9, AR052: 8, AR033: 6, AR060: 5, AR096: 5, AR061: 4, AR089: 4, AR039: 4, AR053: 4, AR104: 3 L0794: 10, L0766: 9, L0740: 9, L0749: 8, H0046: 7, L0758: 7, H0521: 6, L0803: 5, S0358: 4, H0457: 4, L0769: 4, L0744: 4, L0439: 4, L0747: 4, L0750: 4, L0779: 4, H0657: 3, H0266: 3, H0553: 3, H0090: 3, H0413: 3, L0770: 3, L0804: 3, L0775: 3, L0659: 3, L0438: 3, H0519: 3, S0152: 3, L0748: 3, L0731: 3, H0445: 3, S0026: 3, H0265: 2, S0212: 2, S0278: 2, H0050: 2, S0440: 2, S0002: 2, L0763: 2, L0761: 2, L0764: 2, L0771: 2, L0776: 2, L0809: 2, L0789: 2, S0126: 2, H0659: 2, H0660: 2, S0330: 2, H0539: 2, L0751: 2, L0777: 2, L0757: 2, L0595: 2, H0423: 2, H0624: 1, S0040: 1, H0583: 1, H0341: 1, H0484: 1, S0418: 1, S0420: 1,				5-26, 54-70, 73-89

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| 1124 | HUJBO10 | 886364 | 1134 | 204 - 1079 | 2539 | Gln-56 to Leu-68, Glu-88 to Asn-95, Glu-122 to Leu-127, Val-136 to Cys-145, Gly-185 to Leu-191, Leu-239 to Lys-252. | AR089: 2, AR053: 2, AR060: 2, AR033: 2, AR104: 2, AR096: 2, AR039: 1, AR055: 1, AR061: 1, AR052: 0 L0779: 3, H0650: 1, H0560: 1, L0770: 1, L0806: | 249-282, 274-290, 31-47 |

1125	HMUAP06	886417	1135	1684 - 905	2540	Val-62 to Gly-67, Glu-130 to Leu-135, Glu-164 to Glu-179, Glu-213 to Gly-223.	AR052: 5, AR053: 4, AR039: 3, AR033: 2, AR104: 2, AR089: 2, AR055: 2, AR096: 2, AR061: 2, AR060: 1 S0212: 1, T0114: 1, H0253: 1, H0266: 1, H0644: 1, H0494: 1, H0529: 1, H0435: 1, L0759: 1, L0596: 1 and H0423: 1.	1, L0655: 1, H0444: 1, L0596: 1, L0591: 1 and S0424: 1.	239-255, 138-154, 179-195
1126	HLYCA31	886496	1136	956 - 261	2541	Met-1 to Pro-7, Ser-12 to His-19.	AR039: 25, AR033: 16, AR089: 13, AR104: 12, AR096: 12, AR053: 11, AR052: 10, AR055: 9, AR060: 9, AR061: 7 H0052: 3, L0666: 3, L0758: 3, S0007: 2, H0201: 2, H0090: 2, H0672: 2, L0748: 2, L0747: 2, L0749: 2, L0752: 2, H0445: 2, H0265: 1, S0134: 1, S0212: 1, S0348: 1, S0045: 1, H0393: 1, S0222: 1, T0060: 1, H0013: 1, T0082: 1, H0318: 1, L0471: 1, H0266: 1, L0455: 1, L0456: 1,		175-208

1127	HETIY94	886524	1137	88 - 612	2542	Pro-15 to Glu-25, Ala-107 to Gln-112.	S0366: 1, H0561: 1, H0131: 1, S0150: 1, H0538: 1, S0422: 1, L0774: 1, L0636: 1, H0547: 1, H0593: 1, S0136: 1, S0028: 1, L0751: 1, L0745: 1, L0779: 1, L0731: 1, L0759: 1, H0707: 1, H0423: 1 and S0446: 1.	AR089: 6, AR055: 5, AR060: 5, AR033: 3, AR061: 3, AR052: 3, AR096: 3, AR104: 3, AR053: 2, AR039: 2 L0751: 2, L0803: 1, L0805: 1, S0374: 1, H0658: 1 and L0747: 1.	23-59
1128	HRGBW44	886559	1138	78 - 1259	2543	Glu-7 to Trp-15, Glu-24 to Arg-31, Arg-71 to Pro-80, Glu-91 to Pro-98, Gln-112 to Thr-130, Asp-168 to Leu-175, Lys-202 to Lys-207, Glu-291 to Pro-298, Lys-332 to Ile-340, Asp-343 to Glu-351, Lys-363 to Ser-380, Leu-386 to Ala-393.		AR052: 49, AR096: 28, AR089: 27, AR053: 22, AR060: 20, AR039: 18, AR033: 11, AR061: 9, AR055: 6, AR104: 5 H0617: 6, L0748: 5, L0809: 4, L0581: 4, L0789: 3, L0747: 3, L0779: 3, L0518: 2, S0330: 2, L0743: 2, L0439: 2, L0749: 2, L0750: 2, H0170: 1, H0484: 1, H0497: 1, H0427: 1, H0599: 1, H0618: 1, H0544:	37-56, 306-326, 258-281, 209-225, 178-194, 139-155

1129	HMTAU01	886593	1139	274 - 1629	2544	His-17 to Arg-24, Asp-46 to Leu-51, Glu-161 to Glu-172, Arg-273 to Glu-284, Pro-291 to Lys-296, Pro-317 to Ala-326, Pro-393 to Pro-410, Glu-416 to Ile-421.	AR053: 4, AR052: 4, AR096: 4, AR089: 3, AR060: 2, AR033: 2, AR055: 1, AR061: 1, AR104: 1, AR039: 0 L0748: 5, H0351: 3, L0794: 3, L0803: 3, L0779: 3, H0423: 3, L0766: 2, L0804: 2, H0686: 1, S0116: 1, S0354: 1, H0411: 1, H0600: 1, H0587: 1, H0486: 1, H0421: 1, H0565: 1, L0060: 1, H0551: 1, H0268: 1, H0059: 1, S0440: 1, H0646: 1, L0800: 1, L0805: 1, L0653: 1, L0776: 1,	1, H0545: 1, H0150: 1, H0009: 1, H0562: 1, S0388: 1, H0687: 1, H0181: 1, H0166: 1, H0264: 1, S0112: 1, H0494: 1, H0509: 1, S0144: 1, S0344: 1, L0640: 1, L0770: 1, L0769: 1, L0766: 1, L0803: 1, L0776: 1, L0636: 1, L0790: 1, L0665: 1, H0547: 1, S0126: 1, H0672: 1, H0518: 1, H0134: 1, L0759: 1, S0434: 1, L0592: 1, H0543: 1, H0422: 1 and H0352: 1.	101-123, 138-154, 327-343, 365-381, 206-222, 77-93

| 1130 | HDPVO38 | 886670 | 1140 | 49 - 1644 | 2545 | Pro-46 to Arg-51, Leu-65 to Asp-70, Thr-103 to Pro-113. | S0374: 1, H0658: 1, H0518: 1, H0436: 1, L0749: 1, L0758: 1, S0276: 1 and L0465: 1. AR033: 2, AR089: 2, AR060: 1, AR053: 1, AR039: 1, AR061: 1, AR055: 1, AR052: 0, AR096: 0, AR104: 0 L0794: 6, L0749: 5, L0756: 5, S0192: 5, L0805: 4, L0747: 4, L0752: 4, L0455: 3, H0038: 3, L0770: 3, L0793: 3, L0591: 3, H0046: 2, H0135: 2, L0769: 2, L0637: 2, L0776: 2, L0659: 2, L0518: 2, L0809: 2, L0565: 2, H0522: 2, L0748: 2, S0282: 1, H0664: 1, S0418: 1, S0420: 1, S0007: 1, S0132: 1, H0333: 1, H0486: 1, H0618: 1, S0010: 1, H0596: 1, L0040: 1, L0471: 1, S0051: 1, T0023: 1, H0316: 1, H0494: 1, S0440: 1, H0509: 1, H0647: 1, L0640: 1, L0772: 1, L0800: 1, L0641: 1, L0662: 1, L0768: 1, L0803: 1, L0774: 1, L0651: 1, | 271-288, 338-355, 128-144, 230-246, 311-327 |

1131	HSDKL35	886684	1141	137 - 484	2546		
						AR033: 11, AR104: 6, AR053: 5, AR089: 5, AR052: 5, AR061: 5, AR060: 5, AR055: 4, AR096: 4, AR039: 3 L0803: 13, L0794: 11, S0358: 10, L0766: 7, S0126: 7, L0439: 7, L0659: 6, L0608: 6, S0212: 5, H0521: 5, L0777: 5, S0360: 4, H0644: 4, L0769: 4, L0805: 4, L0809: 4, L0754: 4, S0354: 3, S0010: 3, H0581: 3, L0483: 3, L0800: 3, L0764: 3, L0806: 3, L0663: 3, S0374: 3, L0740: 3, L0591: 3, H0624: 2, H0638: 2, S0356: 2, S0132: 2, H0327: 2, H0510: 2, H0031: 2, S0036: 2, L0771: 2,	24-55, 45-66, 1-22
						L0628: 1, L0559: 1, L0542: 1, L0787: 1, L0790: 1, L0665: 1, T0068: 1, H0547: 1, H0689: 1, H0684: 1, H0672: 1, S0378: 1, H0521: 1, H0555: 1, H0478: 1, S0028: 1, L0750: 1, L0779: 1, L0755: 1, L0759: 1, S0308: 1, L0361: 1 and S0458: 1.	

L0662: 2, L0651: 2, H0519: 2, H0689: 2, H0518: 2, H0552: 2, S3014: 2, S0028: 2, L0745: 2, L0779: 2, L0752: 2, L0731: 2, L0757: 2, S0434: 2, L0596: 2, L0589: 2, L0599: 2, L0362: 2, H0170: 1, H0556: 1, S6024: 1, S0116: 1, S0282: 1, S0400: 1, H0661: 1, S0444: 1, H0676: 1, S0408: 1, T0008: 1, H0637: 1, H0580: 1, S0046: 1, L0717: 1, H0013: 1, L0021: 1, H0318: 1, S0474: 1, S0049: 1, H0263: 1, H0596: 1, H0024: 1, L0163: 1, S0051: 1, H0355: 1, S0003: 1, H0252: 1, T0006: 1, H0628: 1, H0124: 1, H0090: 1, H0040: 1, H0634: 1, S0372: 1, S0440: 1, H0633: 1, S0144: 1, S0426: 1, H0517: 1, L0796: 1, L0761: 1, L0667: 1, L0373: 1, L0374: 1, L0773: 1, L0364: 1, L0387: 1, L0804: 1, L0650: 1, L0774: 1, L0653: 1, L0776: 1, L0655: 1, L0628: 1, L0657: 1, L0782: 1,

1132	HTLJA77	886742	1142	213 - 605	2547		37-67
					Gly-13 to Pro-21, Ser-67 to Pro-73, Gly-92 to Leu-98.	L0790: 1, L0666: 1, L0665: 1, S0053: 1, H0144: 1, H0520: 1, H0435: 1, H0659: 1, H0648: 1, H0539: 1, S0380: 1, S0152: 1, H0522: 1, S0404: 1, S0406: 1, L0747: 1, L0756: 1, L0758: 1, S0260: 1, H0445: 1, L0366: 1, S0011: 1, H0665: 1, S0196: 1 and H0542: 1. AR055: 12, AR061: 6, AR060: 6, AR033: 6, AR089: 5, AR096: 5, AR052: 5, AR039: 4, AR104: 3, AR053: 3 L0752: 7, L0747: 6, L0666: 5, L0803: 4, L0776: 4, S0222: 3, L0662: 3, L0766: 3, L0777: 3, L0361: 3, S0114: 2, H0254: 2, H0661: 2, S0354: 2, H0618: 2, H0594: 2, H0188: 2, H0424: 2, H0135: 2, L0764: 2, L0805: 2, L0655: 2, L0789: 2, L0532: 2, S0052: 2, L0438: 2, H0521: 2, L0742: 2, L0743: 2, L0754: 2, L0750: 2, L0755: 2, H0422: 2, H0685: 1, S0342: 1, H0713: 1, S0134: 1,	

1133	HCFLJ17	886761	1143	34 - 381	2548		88-107
					Glu-8 to Glu-18, Glu-32 to Ser-56.	H0583: 1, H0255: 1, H0402: 1, S0358: 1, S0476: 1, L0717: 1, H0392: 1, H0455: 1, H0613: 1, L0586: 1, S0280: 1, L0021: 1, H0706: 1, H0390: 1, H0581: 1, H0251: 1, H0544: 1, H0545: 1, H0046: 1, L0471: 1, T0010: 1, H0028: 1, H0615: 1, H0604: 1, H0673: 1, H0708: 1, H0413: 1, H0102: 1, L0770: 1, L0769: 1, L0772: 1, L0646: 1, L0364: 1, L0794: 1, L0774: 1, L0523: 1, L0806: 1, L0653: 1, L0659: 1, L0663: 1, L0664: 1, L0665: 1, H0144: 1, S0374: 1, H0435: 1, H0658: 1, H0660: 1, H0696: 1, H0576: 1, S0028: 1, L0748: 1, L0749: 1, L0756: 1, L0779: 1, L0758: 1, L0366: 1, S0194: 1, H0423: 1, S0458: 1, S0446: 1, H0506: 1 and H0352: 1. AR052: 8, AR053: 7, AR039: 6, AR096: 6, AR033: 5, AR089: 4, AR060: 4, AR055: 4, AR104: 3, AR061: 2	

L0758: 7, S0358: 5,
L0362: 5, L0766: 4, L0754:
4, H0423: 4, H0318: 3,
H0551: 3, H0529: 3, L0803:
3, H0519: 3, L0750: 3,
L0777: 3, H0650: 2, H0369:
2, H0575: 2, S0474: 2,
T0110: 2, S0003: 2, H0268:
2, L0770: 2, L0662: 2,
L0375: 2, H0144: 2, S0374:
2, S0152: 2, L0780: 2,
L0752: 2, L0731: 2, H0445:
2, L0596: 2, L0605: 2,
L0599: 2, L0608: 2, H0543:
2, H0624: 1, H0170: 1,
H0716: 1, H0657: 1, H0402:
1, S0420: 1, S0442: 1,
S0360: 1, H0675: 1, S0045:
1, S0476: 1, L0717: 1,
H0600: 1, H0587: 1, H0497:
1, H0574: 1, H0098: 1,
H0037: 1, L0105: 1, H0581:
1, H0052: 1, H0544: 1,
L0471: 1, H0060: 1, H0328:
1, H0622: 1, L0483: 1,
L0055: 1, H0598: 1, H0090:
1, H0040: 1, H0413: 1,
H0561: 1, L0638: 1, L0667:
1, L0646: 1, L0794: 1,
L0774: 1, L0805: 1, L0655:

#	Clone	ID		Range	SEQ	Region	Clones	Variants		Positions
1134	HNGKM74	886937	1144	26 - 988	2549	Phe-140 to Lys-151.	1, L0527: 1, L0657: 1, L0659: 1, L0526: 1, L0783: 1, L0809: 1, L4501: 1, L0666: 1, H0520: 1, H0547: 1, H0690: 1, H0658: 1, H0660: 1, H0521: 1, H0555: 1, H0436: 1, S0028: 1, L0742: 1, L0756: 1, S0192: 1, S0242: 1, S0194: 1 and S0276: 1.	AR061: 4, AR055: 4, AR053: 4, AR060: 3, AR089: 3, AR052: 3, AR039: 3, AR033: 3, AR096: 3, AR104: 2 L0800: 1 and S0428: 1.		168-190, 97-114, 207-223
1135	HTTJQ27	887007	1145	112 - 666	2550	Pro-2 to Cys-7, Ile-113 to Lys-118, Glu-162 to Ala-170.		AR055: 3, AR061: 3, AR033: 3, AR052: 3, AR089: 3, AR060: 2, AR096: 2, AR104: 2, AR053: 1, AR039: 1 S0250: 3, L0659: 3, H0038: 2, S0002: 2, S0330: 2, S0360: 1, H0604: 1, H0634: 1, L0764: 1, L0766: 1, H0660: 1, S0380: 1 and L0751: 1.		49-66
1136	HBCBF11	887008	1146	80 - 733	2551	Ser-57 to Gly-72, Thr-91 to Gly-96,		AR053: 2, AR089: 2, AR096: 2, AR055: 1,		125-159

#	Clone			Range	SEQ ID NO:	Features	Region
						Asn-104 to Gln-112, Asp-119 to Lys-126. AR052: 1, AR060: 1, AR061: 1, AR104: 1, AR039: 1, AR033: 1 H0592: 2, L0754: 2, S0132: 1, H0370: 1, H0587: 1, S0344: 1, L0665: 1, H0682: 1 and H0555: 1.	
1137	HFOYG86	887019	1147	247 - 570	2552	Arg-26 to Gly-34, Tyr-71 to Lys-77. AR089: 3, AR052: 3, AR061: 2, AR060: 2, AR104: 2, AR033: 1, AR055: 1, AR053: 1, AR039: 0 L0777: 2, L0731: 2, L0659: 1 and S0276: 1.	77-102, 47-68
1138	HKGCJ92	887027	1148	504 - 1166	2553	Lys-19 to Val-24, Ser-27 to Asn-37, Asn-82 to Leu-87. AR039: 3, AR089: 2, AR096: 2, AR055: 1, AR104: 1, AR033: 1, AR053: 1, AR061: 1, AR052: 0 H0538: 4, S0374: 4, S0444: 2, L0748: 2, S0442: 1, S0358: 1, H0156: 1, L0803: 1, L0774: 1 and L0608: 1.	182-208
1139	HFPAB23	887054	1149	55 - 417	2554	Met-1 to Ile-11, Ser-21 to Val-26, Asn-42 to Asp-50, Gln-57 to Val-66, Gly-88 to Ala-98. AR052: 7, AR061: 6, AR104: 5, AR055: 5, AR033: 5, AR060: 5, AR089: 4, AR096: 4, AR053: 2, AR039: 2	103-121

| 1140 | HWAGL92 | 887056 | 1150 | 769 - 185 | 2555 | Pro-22 to Gly-28, Gln-32 to Gln-38, Ser-60 to Phe-68, Cys-104 to Tyr-110, Lys-163 to Ser-172, Ser-175 to His-182, Gln-185 to Trp-194. | AR096: 16, AR033: 6, AR039: 6, AR053: 6, AR055: 4, AR052: 4, AR089: 4, AR060: 3, AR061: 2, AR104: 2 H0692: 7, L0766: 5, H0393: 3, H0250: 3, H0581: 3, L0779: 3, L0755: 3, S0354: 2, S0408: 2, L0754: 2, S0358: 1, S0376: 1, S0360: 1, H0640: 1, H0574: 1, H0486: 1, H0013: 1, H0004: 1, H0421: 1, H0239: 1, H0252: 1, H0031: 1, H0553: 1, H0644: 1, H0634: 1, S0144: 1, S0344: 1, L0794: 1, L0803: 1, L0804: 1, L0775: 1, L0653: 1, L0659: 1, S0374: 1, H0518: 1, S0044: 1, S0404: 1, H0555: 1, L0748: 1, L0756: 1, L0777: 1, L0752: 1, L0599: 1, H0653: 1 and H0506: 1. H0171: 2, L0747: 2, H0624: 1, S6016: 1, S0222: 1, S0010: 1, H0620: 1, L0666: 1, L0665: 1 and L0777: 1. | 127-160, 80-96, 44-60 |

1141	HADME31	887280	1151	126 - 443	2556	AR096: 6, AR055: 6, AR039: 5, AR089: 5, AR033: 5, AR053: 5, AR060: 5, AR061: 5, AR052: 4, AR104: 3 L0747: 7, L0750: 6, L0770: 4, L0758: 4, L0769: 3, L0774: 2, L0748: 2, L0759: 2, S6024: 1, S0356: 1, S0360: 1, S0408: 1, H0333: 1, H0559: 1, H0486: 1, S0280: 1, H0390: 1, H0545: 1, L0471: 1, S0440: 1, H0641: 1, L0763: 1, L0775: 1, L0783: 1, L0809: 1, H0144: 1, H0690: 1, H0521: 1, S3012: 1, L0749: 1, L0752: 1 and L0590: 1.	88-105
1142	HEGBA84	887341	1152	17 - 1186	2557	Ser-17 to Ser-23, Gly-44 to Pro-50. AR039: 27, AR033: 17, AR089: 17, AR104: 16, AR053: 16, AR055: 15, AR060: 13, AR052: 12, AR096: 12, AR061: 9 L0769: 5, L0779: 4, L0759: 4, L0770: 3, L0775: 3, L0776: 3, L0439: 3, L0740: 2, L0747: 2, L0777: 2, L0601: 2, S0418: 1, L0429: 1, H0550: 1, H0253: 1, H0081: 1, H0207: 1,	145-162, 116-132

| 1143 | HWHPM7 4 | 887540 | 1153 | 116 - 1048 | 2558 | Gln-71 to Tyr-78, Pro-130 to Ser-135. | AR096: 10, AR089: 7, AR060: 5, AR053: 5, AR061: 5, AR039: 4, AR033: 4, AR104: 3, AR052: 2 H0494: 5, L0777: 3, L0747: 2, H0586: 1, H0587: 1, H0038: 1, L0768: 1, L0389: 1, L0775: 1, L0376: 1, L0806: 1, H0519: 1, S0328: 1, S0330: 1, S3014: 1, L0731: 1 and L0758: 1. | H0646: 1, L0764: 1, L0773: 1, L0768: 1, L0549: 1, L0381: 1, L0774: 1, L0375: 1, L0783: 1, S0052: 1, H0547: 1, H0658: 1, H0521: 1, H0555: 1, S0028: 1, L0751: 1, L0752: 1 and L0755: 1. | 223-260, 18-34 |
| 1144 | HHEEU21 | 887582 | 1154 | 49 - 1041 | 2559 | Glu-69 to Glu-74, Thr-78 to Arg-85, Lys-100 to Tyr-107, Pro-185 to Thr-194, Arg-249 to Ser-254, Thr-259 to Arg-269, His-289 to Ile-296, Thr-298 to Asp-303, Asn-312 to Ser-322. | AR096: 9, AR053: 7, AR089: 7, AR052: 6, AR060: 4, AR033: 4, AR039: 4, AR055: 3, AR104: 3, AR061: 2 H0422: 4, H0542: 3, H0591: 2, H0423: 2, H0125: 1, H0486: 1, H0634: 1 and H0436: 1. | | 221-251, 3-19, 49-65 |

1145	HKLSC61	887803	1155	407 - 757	2560	Lys-14 to Ser-20, Pro-34 to Ser-39, Ser-89 to Ser-95.	AR039: 26, AR052: 20, AR053: 16, AR033: 14, AR104: 13, AR060: 12, AR055: 12, AR096: 12, AR061: 12, AR089: 12 H0251: 1, H0235: 1 and S0050: 1.	39-77, 68-88
1146	HEOMP62	887943	1156	193 - 753	2561	Gln-13 to Lys-20, Lys-26 to Ala-34, Met-72 to Leu-78.	AR039: 38, AR053: 22, AR096: 20, AR104: 19, AR055: 19, AR033: 17, AR052: 15, AR089: 15, AR060: 11, AR061: 7 H0457: 4, L0794: 3, H0580: 2, S0344: 2, L0667: 2, L0809: 2, H0583: 1, S0116: 1, H0581: 1, H0421: 1, H0439: 1, H0179: 1, L0803: 1, L0804: 1, L0775: 1, L0659: 1, H0710: 1, S0190: 1 and L0747: 1.	36-69
1147	HLJEB18	888028	1157	328 - 1248	2562	Glu-14 to Ser-22, Thr-70 to Arg-76, Gln-90 to Gly-101, Asn-167 to Ser-172, Glu-179 to Ala-186, Val-193 to Gln-200, Leu-210 to Ser-217, Gln-239 to Gln-244, Glu-254 to Asn-266.	AR039: 61, AR104: 30, AR033: 27, AR053: 25, AR096: 23, AR089: 20, AR052: 20, AR055: 16, AR060: 15, AR061: 13 H0584: 26, H0265: 4, H0167: 3, S0114: 3, H0542: 3, H0556: 2, H0486: 2, T0042: 2, H0423: 2, H0575:	276-307, 104-120

1148	HAMFN18	888042	1158	50 - 412	2563	Ser-31 to Gly-40.	1, H0581: 1, H0375: 1, H0553: 1, H0376: 1, H0591: 1, H0040: 1, H0264: 1, L0774: 1, L0775: 1, S0328: 1, L0754: 1, L0749: 1, L0750: 1 and H0422: 1. AR096: 6, AR052: 5, AR033: 4, AR055: 4, AR104: 2, AR060: 3, AR061: 2, H0497: 1, H0560: 1, S0028: 1 and H0667: 1.	50-68
1149	HWAEU20	888047	1159	416 - 1183	2564	Ile-74 to Ser-86, Thr-136 to Lys-144, Lys-250 to Glu-256.	AR096: 6, AR033: 5, AR053: 4, AR052: 3, AR039: 3, AR089: 2, AR055: 2, AR061: 1, AR060: 1, AR104: 1 H0581: 1	99-126, 1-23-42, 1-18, 218-235, 157-173, 52-68
1150	HDPBG11	888121	1160	39 - 734	2565	Val-3 to Pro-8, Val-14 to Ile-19, Pro-23 to Gly-31, Ser-93 to Asp-100.	AR060: 6, AR039: 5, AR055: 5, AR089: 5, AR033: 4, AR053: 4, AR061: 4, AR096: 4, AR052: 2, AR104: 2 S0476: 41, H0271: 33, S0132: 14, H0521: 14, S0046: 13, H0623: 13, H0416: 7, H0634: 6, H0575: 5, H0522: 5, S0436: 5,	38-67

H0638: 4, H0250: 4, H0641: 4, S0053: 4, H0556: 3,
H0437: 3, H0069: 3, H0179: 3, H0551: 3, H0056: 3,
L0794: 3, S0052: 3, H0159: 2, H0657: 2, H0663: 2,
S0278: 2, H0431: 2, H0457: 2, H0719: 2, L0483: 2,
H0649: 2, L0771: 2, L0662: 2, H0689: 2, H0518: 2,
L0581: 2, H0713: 1, T0049: 1, H0656: 1, S0298: 1,
H0662: 1, S0418: 1, S0442: 1, S0358: 1, H0392: 1,
H0442: 1, H0587: 1, H0486: 1, T0109: 1, H0190: 1,
H0635: 1, H0042: 1, H0530: 1, H0544: 1, H0545: 1,
H0150: 1, S0051: 1, S0316: 1, T0023: 1, H0379: 1,
S0016: 1, H0560: 1, H0561: 1, H0509: 1, H0633: 1,
S0344: 1, S0426: 1, L0763: 1, L3904: 1, L0761: 1,
L0667: 1, L0767: 1, L0649: 1, L0388: 1, L0775: 1,
L0806: 1, L0805: 1, L0656: 1, L0809: 1, L0790: 1,
L0663: 1, L0665: 1, S0428: 1, S0216: 1, H0435: 1,

1151	HHFJI87	888142	1161	204 - 953	2566	H0666: 1, H0672: 1, S0378: 1, H0528: 1, S0044: 1, H0187: 1, S0032: 1, L0749: 1, L0750: 1, L0759: 1, S0434: 1, L0593: 1 and H0422: 1. AR055: 9, AR039: 5, AR053: 4, AR089: 4, AR060: 4, AR052: 4, AR061: 3, AR033: 3, AR104: 2, AR096: 2 L0666: 6, L0776: 4, H0039: 2, H0622: 2, L0633: 2, L0439: 2, S0354: 1, H0619: 1, H0357: 1, H0590: 1, S0010: 1, H0596: 1, L0644: 1, L0805: 1 and H0144: 1.	136-162, 176-204, 76-95, 108-124, 2-18
1152	HWLEQ41	888156	1162	93 - 950	2567	AR089: 30, AR096: 29, AR104: 25, AR033: 22, AR052: 18, AR053: 14, AR060: 9, AR039: 6, AR055: 5, AR061: 4 S0354: 9, S0358: 3, H0494: 3, H0519: 2, H0521: 2, L0754: 2, H0170: 1, S0040: 1, S0114: 1, H0484: 1, H0483: 1, H0255: 1, S0376: 1, S0046: 1, H0619: 1.	158-177, 132-150, 73-91, 193-209, 228-244, 253-269

1153	HTOIB37	888174	1163	773 - 1582	2568	Thr-155 to Cys-161, Arg-182 to Arg-194, Leu-209 to Lys-214.	AR060: 57, AR055: 52, AR039: 40, AR104: 39, AR033: 37, AR053: 35, AR089: 30, AR061: 26, AR096: 12, AR052: 6 H0618: 4, H0254: 3, H0255: 3, L0748: 3, H0253: 2, H0617: 2, L0438: 2, L0361: 2, S0442: 1, S0360: 1, S0468: 1, H0370: 1, H0333: 1, H0581: 1, H0252: 1, H0032: 1, H0264: 1, H0413: 1, H0529: 1, L0768: 1, H0672: 1, L0777: 1 and H0542: 1.	1, H0549: 1, H0042: 1, S0474: 1, H0581: 1, H0052: 1, H0083: 1, L0773: 1, L0517: 1, L0383: 1, S0374: 1, S0152: 1, S3014: 1, L0751: 1, L0759: 1, H0543: 1 and H0422: 1.	76-92, 16-32, 101-117, 34-50, 137-153
1154	HTGBM16	888244	1164	96 - 1118	2569	Ser-74 to Gln-82, Ser-170 to Asn-178, His-186 to Ala-199, Arg-209 to Leu-216.	AR089: 8, AR060: 8, AR096: 7, AR053: 5, AR104: 5, AR033: 5, AR061: 4, AR055: 3, AR039: 3, AR052: 0 L0748: 3, H0494: 2, H0547: 2, S0134: 1, S0278:		231-250, 2-19, 43-59, 100-116

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1156	HTELC21	888321	1166	88 - 453	2571	1, H0388: 1, H0598: 1, H0413: 1, S0438: 1, H0641: 1, S0002: 1, L0662: 1, L0805: 1, L0809: 1, L0519: 1, L5623: 1, L0663: 1, L0664: 1, H0520: 1, S0126: 1, L0753: 1, S0434: 1, L0599: 1, S0011: 1 and H0667: 1,	AR053: 16, AR039: 15, AR033: 13, AR055: 13, AR052: 10, AR089: 10, AR061: 9, AR096: 7, AR060: 7, AR104: 4 H0253: 8, H0038: 4, H0616: 3, H0618: 2, L0758: 2, L0794: 1 and L0779: 1.			12-37, 50-77, 85-101, 40-56
1157	HTPGV36	888376	1167	2639 - 306	2572	AR104: 19, AR033: 18, AR089: 12, AR055: 9, AR060: 6, AR061: 6, AR096: 6, AR052: 5, AR053: 5, AR039: 4 H0695: 78, L0747: 13, H0013: 12, L0665: 11, L0662: 10, H0547: 10, L0592: 10, S0360: 8, H0545: 8, L0659: 8, L0666: 8, H0580: 7, S0010: 7, H0519: 7, L0748: 6, L0595:	Pro-51 to Ala-59.	Xp11.23	300047, 300071, 300110, 300600, 301000, 301000, 301830, 309470, 309500, 309610, 309850, 311050,	555-575, 536-552, 760-776

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T0082: 1, H0706: 1, L0109:
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1, H0494: 1, H0652: 1,
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1, L0796: 1, L0637: 1,
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1, L0628: 1, L0527: 1,
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1, L0647: 1, L0367: 1,
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AR052: 2, AR033: 2, AR053: 2, AR096: 1, AR089: 1, AR060: 1, AR039: 0, AR061: 0, AR104: 0
H0599: 2, S0474: 2, H0266: 2, L0759: 2, H0556: 1, H0638: 1, S0418: 1, H0733: 1, S6022: 1, L0021: 1, S0010: 1, H0581: 1, H0123: 1, H0050: 1, H0024: 1, H0553: 1, H0644: 1, H0708: 1, L0763: 1, L0641: 1, L0766: 1, L0805: 1, L0655: 1, H0539: 1, S0028: 1, L0756: 1 and L0777: 1. | 53-73 |
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1160	HCBME31	888903	1170	79 - 624	2575	Pro-51 to Ser-58.	H0553: 1, H0628: 1, H0488: 1, H0529: 1, S0310: 1, H0435: 1 and L0439: 1. AR096: 3, AR055: 2, AR089: 1, AR052: 1, AR053: 1, AR060: 1, AR061: 1, AR104: 1, AR033: 1, AR039: 1 S0002: 2, L0785: 1, H0661: 1, H0587: 1, H0635: 1, H0051: 1, S0003: 1, S0438: 1, S0344: 1, L0761: 1, L0649: 1, L0792: 1 and L0731: 1.			70-95, 29-45, 1-17
1161	HPMGA51	888905	1171	1129 - 644	2576	Pro-49 to His-57, Pro-64 to Asp-73, Thr-100 to Arg-106, Lys-145 to Glu-151.	AR055: 4, AR096: 3, AR060: 3, AR053: 3, AR104: 2, AR052: 2, AR033: 2, AR089: 2, AR061: 1, AR039: 0 H0031: 2, L0600: 2, H0713: 1, S0052: 1, H0539: 1, S0436: 1 and L0603: 1.			104-131
1162	HDQDC13	888998	1172	5 - 643	2577	Gln-15 to Gly-23.	AR053: 2, AR052: 1, AR033: 1, AR096: 1, AR089: 0, AR060: 0, AR061: 0, AR055: 0, AR104: 0, AR039: 0 L0766: 7, H0556: 6, L0662: 4, L0789: 4, L0438:	16p12-p11	108730, 147781, 172471, 186580, 266600, 600760, 600760,	173-189, 105-121

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1163	HLHFX80	889324	1173	81 - 473	2578	Arg-16 to Ser-25, Phe-30 to Asp-38, Gln-97 to Lys-104, Ser-113 to His-119.	1, H0423: 1 and L0600: 1. AR039: 2, AR096: 2, AR060: 1, AR053: 1, AR089: 1, AR104: 1, AR033: 1, AR061: 0, AR055: 0, AR052: 0 H0556: 1, L0534: 1, H0431: 1, H0024: 1 and S0428: 1.	61-81
1164	HSLKC45	889371	1174	124 - 1245	2579	Ser-75 to Leu-81, Arg-101 to Ala-112, Gln-162 to Asn-172, Tyr-178 to Leu-197, Glu-204 to Arg-219, Arg-252 to Ile-269, Pro-271 to Asp-280, Glu-297 to Lys-303, Glu-313 to Asn-325, Ser-354 to Gly-365.	AR055: 7, AR033: 7, AR060: 5, AR052: 4, AR089: 4, AR061: 4, AR053: 4, AR096: 3, AR104: 2, AR039: 2 H0545: 2, L0659: 2, H0265: 1, H0556: 1, H0295: 1, S0418: 1, S0420: 1, S0358: 1, L0717: 1, H0635: 1, H0551: 1, T0067: 1, H0494: 1, L0662: 1, L0804: 1, L0809: 1, S0126: 1, H0658: 1, H0521: 1, S0390: 1, L0780: 1, L0731: 1, S0436: 1 and H0423: 1.	220-252, 2-26
1165	HOGBN93	889792	1175	503 - 3	2580	Gly-52 to Ser-57, Phe-81 to Arg-89, Lys-125 to Gly-137.	AR039: 42, AR052: 40, AR053: 25, AR033: 24, AR104: 22, AR089: 20, AR096: 17, AR060: 13, AR061: 13, AR055: 12	59-78, 31-51, 95-112, 7-23, 146-162

1166	HTPHE46	889999	1176	96 - 653	2581	Glu-13 to Gln-22, Pro-86 to Asp-91, Arg-98 to Gly-104, Gln-170 to Cys-183.	AR039: 19, AR060: 12, AR096: 10, AR104: 9, AR053: 9, AR055: 9, AR033: 8, AR052: 7, AR089: 7, AR061: 5 S0414: 9, S0422: 7, L0662: 7, S0444: 6, L0748: 4, L0754: 4, L0581: 4, S0442: 3, H0031: 3, L0666: 3, H0656: 2, S0358: 2, S0360: 2, H0013: 2, L0471: 2, S0438: 2, S0440: 2, L0598: 2, L0803: 2, L0540: 2, L0756: 2, L0752: 2, L0758: 2, L0759: 2, S0242: 2, H0624: 1, S0282: 1, H0393: 1, H0586: 1, H0574: 1, H0036: 1, H0004: 1, T0103: 1, T0110: 1, H0571: 1, H0569: 1, H0123: 1, H0594: 1, S6028: 1, H0622: 1, UNKWN: 1, L0649: 1, L0381: 1, L0776: 1, L0659: 1, L0528: 1, L0792: 1, L0793: 1, L0663: 1, L0664: 1, L0665: 1, H0144: 1, S0374: 1, H0547: 1, H0593: 1 H0521: 2, L0770: 1, L0766: 1, H0435: 1 and H0712: 1.	34-58, 63-83

1167	HTXQU08	890638	1177	218 - 661	2582		59-78
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| 1168 | HE8MU78 | 890664 | 1178 | 126 - 1160 | 2583 | Cys-21 to Asn-32, Leu-48 to Arg-53, Gln-154 to Leu-161, Pro-213 to Asp-220, Pro-257 to Glu-265, Lys-274 to Asn-281, Ala-326 to Pro-344. | 1, S0380: 1, S0027: 1, L0748: 1, L0731: 1, L0757: 1, L0758: 1 and L0591: 1. AR096: 18, AR052: 15, AR089: 10, AR060: 9, AR053: 8, AR104: 5, AR033: 4, AR061: 4, AR055: 3, AR039: 2 T0006: 34, L0753: 8, H0013: 2, L0750: 2, T0082: 1, L0745: 1, L0779: 1 and L0759: 1. | 281-316, 1-22 |
| 1169 | HTNBJ17 | 890703 | 1179 | 498 - 824 | 2584 | Gln-8 to Ser-13, Arg-21 to Ser-27, Glu-37 to Lys-42. | AR055: 5, AR096: 4, AR052: 4, AR053: 3, AR060: 3, AR061: 3, AR089: 3, AR033: 3, AR104: 2, AR039: 0 L0748: 12, L0747: 11, S0358: 10, L0766: 8, L0794: 6, L0740: 6, L0779: 6, H0556: 5, L0803: 5, L0749: 5, H0266: 4, L0743: 4, L0744: 4, L0758: 4, H0624: 3, H0265: 3, L0776: 3, S0404: 3, S3014: 3, L0752: 3, L0731: 3, L0599: 3, H0661: 2, L0005: 2, S0360: 2, H0580: 2, S0046: 2, H0645: 2, H0013: 2, | 85-109 |

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1170	HTTJZ84	890714	1180	1309 - 311	2585			
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1189	HE8CW35	894153	22 - 555	2604	Met-1 to Lys-19, Lys-29 to Gly-58, Ala-60 to Gly-88, Ala-90 to Asp-97.	H0521: 1, H0522: 1, S0044: 1, H0555: 1, H0576: 1, L0748: 1 and L0755: 1. / AR033: 21, AR089: 6, AR060: 5, AR061: 2, AR104: 1, AR055: 1, AR096: 0, AR039: 0, H0013: 2, S0051: 2, H0333: 1, H0156: 1, S0049: 1, H0424: 1, L0455: 1, L0768: 1, L0517: 1, L0783: 1, L0809: 1 and L0666: 1.	144-166
1190	HE9SE46	894178	332 - 1066	2605	Ala-29 to Asp-35, Pro-81 to Cys-89, Leu-108 to Gly-119, Glu-125 to Ala-138, Ser-140 to Asn-146, Asp-163 to Glu-174, Ser-180 to Gly-187, Lys-224 to Arg-229, Ile-231 to Tyr-238.	AR033: 2, AR061: 1, AR055: 1, AR089: 1, AR052: 1, AR060: 1, AR053: 1, AR104: 0, AR096: 0, AR039: 0, L0776: 21, L0777: 14, L0439: 12, L0752: 9, L0438: 8, L0591: 7, L0805: 5, L0771: 4, L0803: 4, L0774: 4, S0360: 3, H0013: 3, L0731: 3, L0415: 2, H0052: 2, H0024: 2, S0386: 2, L0663: 2, L0745: 2, L0756: 2, L0596: 2, L0608: 2, S0212: 1, S0222: 1, H0586: 1, H0156: 1, H0596: 1, H0050: 1, S0050: 1,	192-221

| 1191 | HBHMH72 | 894186 | 1201 | 38 - 1711 | 2606 | Ser-2 to Ala-10, Glu-12 to Leu-17, Gly-21 to Val-38. | H0373: 1, S0051: 1, S6028: 1, H0188: 1, S0003: 1, H0031: 1, S0448: 1, S0306: 1, S0440: 1, L0369: 1, L0763: 1, L0773: 1, L0381: 1, L0775: 1, L0659: 1, H0144: 1, T0068: 1, H0547: 1, H0660: 1, S0330: 1, S0406: 1, L0754: 1, L0746: 1, L0750: 1, L0779: 1, L0755: 1, S0260: 1 and H0665: 1. | AR096: 2, AR039: 1, AR033: 1, AR089: 0, AR061: 0, AR053: 0, AR104: 0, AR060: 0, L0749: 5, H0052: 3, H0688: 3, H0090: 3, L0744: 3, L0748: 3, L0439: 3, H0341: 2, L0005: 2, L0665: 2, H0593: 2, L0743: 2, L0751: 2, L0599: 2, T0002: 2, S6024: 1, H0722: 1, S0220: 1, T0040: 1, H0013: 1, H0318: 1, H0251: 1, T0110: 1, H0375: 1, H0266: 1, H0687: 1, L0142: 1, S0112: 1, S0144: 1, S0002: 1, H0529: 1, L0763: 1, L0772: 1, L0768: 1, L0766: 1 | 219-235, 513-529, 66-82, 190-206, 41-57 |

| 1192 | HWAHA1 1 | 894203 | 1202 | 90 - 614 | 2607 | AR061: 3, AR089: 3, AR096: 3, AR039: 2, AR060: 2, AR033: 1, AR104: 1, AR055: 1, AR052: 0, AR053: 0 L0751: 6, H0659: 4, H0657: 2, L0764: 2, L0655: 2, H0682: 2, H0521: 2, L0743: 2, L0749: 2, H0265: 1, T0049: 1, S0134: 1, H0255: 1, H0638: 1, S0358: 1, S0376: 1, H0637: 1, S0045: 1, H0549: 1, H0486: 1, T0060: 1, H0575: 1, H0581: 1, H0061: 1, H0266: 1, L0055: 1, H0068: 1, H0090: 1, H0551: 1, H0413: 1, S0142: 1, S0002: 1, L0769: 1, L0775: 1, L0776: 1, L0657: 1, L0664: 1, H0658: 1, H0670: 1, H0648: 1, S0378: 1, L0779: 1, L0731: 1, L0601: 1 and H0423: 1. | 1, L5564: 1, L0776: 1, S0310: 1, L0438: 1, S0152: 1, H0521: 1, H0187: 1, H0576: 1, S0027: 1, L0740: 1, L0750: 1, L0596: 1, L0591: 1 and L0592: 1. | 111-133, 43-63, 72-98, 137-160 |

1193	HLWAH05	894289	1203	652 - 1503	2608		AR061: 2, AR053: 2, AR096: 2, AR060: 1, AR089: 1, AR052: 1, AR033: 1, AR104: 1, AR039: 1, AR055: 0 H0586: 5, L0751: 2, H0170: 1, H0662: 1, H0638: 1, H0575: 1, H0271: 1, H0553: 1, H0477: 1, H0641: 1, S0002: 1, H0529: 1, L0641: 1, L0803: 1, L0793: 1, H0547: 1, H0689: 1 and H0543: 1.	22q13.1	103050, 103050, 124030, 124030, 138981, 182380, 188826, 190040, 190040, 190040	148-164
1194	HUJCH47	894599	1204	687 - 1283	2609		AR052: 4, AR053: 3, AR033: 1, AR055: 1, AR060: 1, AR061: 0, AR096: 0, AR089: 0, AR039: 0, AR104: 0 H0650: 1, S0420: 1 and H0599: 1.			85-101
1195	HDPCI84	894601	1205	120 - 1091	2610	Leu-90 to Gln-96, Asp-109 to Thr-114, Ile-126 to Lys-133, Val-194 to Arg-207, Asp-219 to Asp-234, Glu-296 to Tyr-304.	AR053: 3, AR060: 3, AR089: 2, AR052: 2, AR039: 2, AR055: 2, AR096: 1, AR033: 1, AR104: 1, AR061: 1 H0521: 4, L0803: 3, S0358: 2, H0489: 2, H0046: 2, S0440: 2, L0794: 2, L0666: 2, H0144: 2, S0126:			138-154

1196	HCRPU72	894605	1206	77 - 799	2611	Gly-25 to Thr-37, Asn-100 to Gly-107, Leu-147 to Asn-153, Ser-185 to Ser-192, Ser-207 to Lys-220.	2, S0342: 1, H0663: 1, S0356: 1, S0408: 1, H0013: 1, L0021: 1, H0705: 1, H0150: 1, H0266: 1, H0039: 1, H0622: 1, H0038: 1, H0551: 1, S0422: 1, L0598: 1, L0646: 1, L0766: 1, L0653: 1, L0656: 1, L0789: 1, L0532: 1, L0663: 1, H0658: 1, L0748: 1, L0777: 1, L0759: 1, S0434: 1, L0596: 1 and H0506: 1. AR039: 27, AR033: 16, AR053: 15, AR089: 14, AR052: 13, AR096: 12, AR055: 10, AR104: 9, AR060: 8, AR061: 7 H0144: 6, H0013: 2 and S0356: 1.	154-170
1197	HFTCCG52	894736	1207	403 - 723	2612	Trp-4 to Asn-18, Pro-32 to Leu-39.	AR061: 28, AR033: 25, AR104: 22, AR055: 22, AR060: 19, AR089: 19, AR052: 12, AR039: 11, AR096: 10, AR053: 8 L0751: 7, L0769: 6, L0750: 5, L0752: 5, H0052: 5, L0771: 4, L0775: 4, L0758: 4, H0556: 3, L0665: 3, H0486: 2, S0010: 2,	48-65, 81-97

H0620: 2, T0006: 2, H0181: 2, H0494: 2, L0774: 2, L0375: 2, L0776: 2, L0512: 2, L0659: 2, H0555: 2, S0206: 2, L0740: 2, L0747: 2, L0596: 2, L0588: 2, S0276: 2, H0624: 1, S0402: 1, T0049: 1, H0341: 1, H0662: 1, S0358: 1, S0376: 1, S0360: 1, S0045: 1, S0476: 1, L0717: 1, H0351: 1, S0222: 1, H0455: 1, T0114: 1, L0021: 1, H0618: 1, T0048: 1, H0318: 1, L0109: 1, H0309: 1, H0544: 1, H0546: 1, H0545: 1, H0009: 1, H0123: 1, L0471: 1, H0424: 1, H0031: 1, H0628: 1, H0617: 1, H0063: 1, H0059: 1, H0100: 1, H0625: 1, H0633: 1, H0646: 1, H0517: 1, L0770: 1, L0764: 1, L0766: 1, L0655: 1, L0657: 1, L0526: 1, L0783: 1, L0809: 1, L0544: 1, L0529: 1, L0664: 1, S0428: 1, H0593: 1, S0126: 1, H0682: 1, H0659: 1, H0670: 1, H0648: 1, L0611: 1, S0432: 1, L0756: 1,

1198	HBINP48	894737	1208	252 - 644	2613			
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1199	HCQDE22	894831	1209	326 - 841	2614	Ile-128 to Gly-134, Phe-145 to Thr-150.	H0628: 1, H0617: 1, H0063: 1, H0059: 1, H0100: 1, H0625: 1, H0633: 1, H0646: 1, H0517: 1, L0770: 1, L0764: 1, L0766: 1, L0655: 1, L0657: 1, L0559: 1, L0526: 1, L0783: 1, L0809: 1, L0544: 1, L0529: 1, L0664: 1, S0428: 1, H0520: 1, H0593: 1, S0126: 1, H0682: 1, H0659: 1, H0670: 1, H0648: 1, L0611: 1, S0432: 1, L0756: 1, L0757: 1, S0436: 1 and S0194: 1. AR055: 10, AR060: 6, AR052: 6, AR033: 5, AR061: 4, AR053: 4, AR096: 3, AR089: 3, AR104: 2, AR039: 1 H0596: 1 and L0749: 1.	25-53, 88-104, 8-24, 52-68
1200	HKGCH22	894999	1210	65 - 502	2615	Met-1 to Arg-8, Arg-57 to Arg-65, Pro-139 to Thr-146.	AR039: 37, AR052: 24, AR053: 19, AR033: 18, AR096: 16, AR104: 16, AR089: 15, AR055: 11, AR060: 10, AR061: 9 L0794: 2, L0663: 2, L0665: 2, S0360: 1, H0042: 1, H0253: 1, H0150: 1, H0038: 1, H0633: 1, S0142: 1.	9-27, 106-123, 79-95, 29-45

1201	HTPGG10	895024	1211	111 - 530	2616	Ser-29 to Ser-34.	1, H0538: 1, L0804: 1, L0657: 1, L0790: 1, L0791: 1, L0666: 1, L0664: 1, H0519: 1, H0659: 1, L0747: 1, L0749: 1, L0779: 1, L0777: 1, L0755: 1 and L0731: 1.	AR055: 8, AR060: 7, AR061: 4, AR053: 4, AR089: 3, AR052: 3, AR033: 3, AR039: 3, AR104: 2, AR096: 1 H0622: 7, S0360: 3, L0809: 3, L0804: 2, L0774: 2, L0775: 2, L0748: 2, H0484: 1, H0014: 1, S0440: 1, L0646: 1, L0643: 1, L0374: 1, L0764: 1, L0771: 1, L0773: 1, L0662: 1, L0803: 1 and L0788: 1.	1-29, 114-137, 81-101, 35-51
1202	HFPHB92	895129	1212	276 - 620	2617	Lys-108 to Ser-113.		AR033: 8, AR055: 7, AR104: 5, AR039: 5, AR060: 5, AR053: 4, AR052: 4, AR089: 4, AR061: 3, AR096: 1 L0745: 12, L0803: 5, L0746: 4, L0749: 4, H0052: 3, L0776: 2, H0547: 2, L0756: 2, S0222: 1, H0431:	1-20, 24-47, 72-99

1203	HLWBY26	895166	1213	61 - 1158	2618	Pro-21 to Pro-39.	AR039: 42, AR053: 26, AR033: 20, AR052: 19, AR096: 19, AR055: 18, AR104: 17, AR089: 17, AR060: 12, AR061: 9 H0545: 11, H0716: 4, H0333: 4, L0794: 4, L0754: 4, H0544: 3, H0546: 3, L0743: 3, L0744: 3, L0757: 3, H0713: 2, S0212: 2, S0360: 2, H0619: 2, H0124: 2, L0771: 2, L0521: 2, S0027: 2, L0751: 2, L0777: 2, L0605: 2, H0550: 1, L0623: 1, H0013: 1, H0150: 1, H0086: 1, H0123: 1, H0288: 1, H0553: 1, H0644: 1, H0628: 1, H0181: 1, H0163: 1, H0087: 1, H0551: 1, H0100: 1, L3904: 1, L0803: 1, L0655: 1, L0656: 1, L0659: 1, L0384: 1, L0809: 1, L0565: 1, H0547: 1, H0658: 1, S0037: 1, S0028: 1, S0206: 1, L0603: 1, S0346: 1, L0471: 1, H0051: 1, S0036: 1, L0770: 1, L0658: 1, L0666: 1, H0519: 1, H0555: 1 and L0779: 1.	292-323

| 1204 | HKAHR43 | 895539 | 1214 | 105 - 2606 | 2619 | Cys-132 to Gly-138, Asn-176 to Met-183, Leu-217 to Val-222, Gln-349 to Thr-354, Glu-406 to Tyr-414, Gln-416 to Tyr-424, Arg-457 to Lys-466, Gln-545 to Glu-552, Gln-576 to Gln-586, His-669 to Val-674, Lys-801 to Thr-821. | AR096: 9, AR061: 7, AR052: 6, AR053: 5, AR089: 5, AR039: 4, AR033: 3, AR104: 3, AR060: 3, AR055: 3 L0771: 6, H0494: 4, S0358: 3, L0803: 3, L0518: 2, L0666: 2, S0354: 1, H0239: 1, H0553: 1, H0181: 1, H0617: 1, H0488: 1, L0648: 1, L0662: 1, L0774: 1, L0659: 1, L0665: 1, H0658: 1, H0648: 1, S0152: 1, S0404: 1 and S0434: 1. 1 and H0665: 1. | 145-176, 422-454, 471-506, 101-131, 779-801, 2-23, 246-262 |
| 1205 | HLDCE43 | 895550 | 1215 | 145 - 627 | 2620 | | AR033: 28, AR053: 27, AR089: 23, AR052: 20, AR039: 20, AR055: 14, AR060: 13, AR061: 12, AR096: 10, AR104: 8 L0751: 7, L0789: 5, L0758: 4, S0356: 3, L0663: 3, H0539: 3, S0418: 2, H0545: 2, H0594: 2, H0424: 2, H0494: 2, S0440: 2, L0806: 2, L0664: 2, H0648: 2, S0380: 2, S0028: 2, L0754: 2, L0749: 2, L0777: 2, L0595: 2, H0556: 1, | 98-115, 132-149, 18-34 |

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1206	HFXKW18	895626	1216	528 - 2336	2621	Ala-39 to Arg-46, Lys-76 to Ile-81, Asn-143 to Trp-149, Asp-154 to Lys-173.	AR061: 3, AR096: 2, AR052: 1, AR089: 1, AR053: 1, AR060: 1, AR039: 1, AR055: 1, AR104: 0, AR033: 0 H0250: 3, S0031: 3, H0271: 2, S0260: 2, S0001: 1, S0282: 1, H0617: 1, L0367: 1, S0053: 1, S0390: 1, L0698: 1 and H0352: 1.	6-35, 281-309, 393-410, 573-589, 84-100, 432-448, 542-558
1207	HSKCP67	895644	1217	299 - 814	2622	Pro-4 to Gln-10, Pro-22 to Arg-28, Glu-63 to Arg-86.	AR055: 8, AR052: 6, AR060: 5, AR033: 4, AR061: 4, AR089: 3, AR096: 3, AR053: 3, AR039: 2, AR104: 2 H0333: 2, L0758: 2, H0619: 1, H0618: 1, H0505: 1, S0051: 1, H0271: 1, S0142: 1, S0027: 1 and L0742: 1.	138-163, 95-118
1208	HBGOJ26	895700	1218	652 - 332	2623	Met-1 to Arg-6.	AR055: 11, AR033: 7, AR060: 6, AR052: 6, AR089: 6, AR061: 5, AR096: 4, AR053: 4, AR104: 2, AR039: 2 H0618: 11, L0743: 8, L0748: 6, L0754: 6, L0731: 6, H0545: 5, H0052: 4, H0546: 4, L0648: 4, L0662:	83-107, 53-69

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2, H0253: 2, H0163: 2,
H0551: 2, S0142: 2, L0770:
2, L0769: 2, L0766: 2,
L0804: 2, L0806: 2, L0659:
2, L0663: 2, H0547: 2,
H0672: 2, S0027: 2, L0759:
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H0543: 2, H0686: 1, S0040:
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S0212: 1, H0254: 1, H0662:
1, H0306: 1, H0402: 1,
S0418: 1, S0360: 1, H0208:
1, S0045: 1, H0393: 1,
H0261: 1, S0222: 1, H0587:
1, H0333: 1, H0486: 1,
H0069: 1, S0049: 1, H0309:
1, H0544: 1, H0123: 1,
H0081: 1, H0620: 1, H0024:
1, T0010: 1, H0286: 1,
H0328: 1, H0553: 1, H0628:
1, H0617: 1, H0616: 1,
H0413: 1, H0100: 1, H0646:
1, S0344: 1, L0763: 1,
L0637: 1, L0761: 1, L0646:

1209	HWHGQ46	895880	1219	514 - 1251	2624	Thr-60 to Ala-65, Leu-94 to Glu-99, Cys-182 to Trp-188.	AR053: 3, AR052: 3, AR061: 2, AR089: 2, AR055: 2, AR033: 2, AR096: 1, AR060: 1, AR104: 1 L0748: 14, L0740: 9, L0755: 9, L0771: 7, L0779: 6, L0662: 5, H0586: 4, L0666: 4, L0439: 4, S0436: 4, H0624: 3, H0615: 3, L0770: 3, L0659: 3, L0809: 3, H0547: 3, S0152: 3, H0521: 3, L0747: 3, H0171: 2, S0045: 2, H0635: 2, H0575: 2, H0546: 2, H0169: 2, H0494: 2, L0763: 2, L0769: 2, L0650: 2, L0653: 2, L0517: 2, H0520: 2, H0593: 2, H0435: 2, L0749: 1, L0644: 1, L0375: 1, L0378: 1, L0776: 1, L0493: 1, L0656: 1, L0788: 1, L0666: 1, H0593: 1, H0660: 1, S0332: 1, S0406: 1, H0555: 1, L0610: 1, S3014: 1, L0744: 1, L0751: 1, L0756: 1, L0779: 1, L0752: 1, L0757: 1, S0434: 1, L0588: 1, L0603: 1 and S0456: 1.	27-61, 1-27, 159-181, 117-142, 68-87, 189-205

1210	HNTOA59	895940	1220	289 - 1455	2625		209-237
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| 1211 | HVVAL93 | 895960 | 1221 | 662 - 1435 | 2626 | Glu-142 to Ser-147, Pro-189 to Lys-200, Lys-235 to Lys-240, Glu-281 to Thr-294, Ile-299 to Ser-306, Ser-309 to Asn-317, Pro-324 to Phe-338, Ser-340 to Gly-352, Cys-355 to Leu-360, Val-374 to Ala-381. | AR053: 1, AR104: 1, AR055: 1, AR061: 1, AR060: 1, AR039: 0 L0439: 19, L0747: 6, L0804: 4, L0438: 4, L0766: 3, H0521: 3, S0212: 2, L0794: 2, L0793: 2, H0144: 2, L0752: 2, L0594: 2, H0265: 1, H0662: 1, S0354: 1, S0360: 1, H0441: 1, H0438: 1, T0039: 1, H0013: 1, H0156: 1, S0010: 1, L0471: 1, H0083: 1, H0266: 1, H0032: 1, H0038: 1, L0351: 1, H0494: 1, H0646: 1, L0598: 1, H0529: 1, L0763: 1, L0769: 1, L0803: 1, L0775: 1, S0374: 1, L0352: 1, H0520: 1, H0519: 1, S0350: 1, L0756: 1, L0779: 1, L0592: 1, H0665: 1 and S0424: 1. AR055: 43, AR089: 17, AR033: 17, AR060: 16, AR052: 14, AR053: 12, AR039: 11, AR096: 10, AR061: 8, AR104: 7 L0754: 2, S0040: 1 and H0672: 1. | 108-138 |

1212	HAMGN09	895968	1222	226 - 1077	2627			150-167
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| 1213 | HHEDS40 | 896083 | 1223 | 161 - 1567 | 2628 | Glu-19 to Lys-30, Ser-130 to Lys-136, Asp-156 to Cys-164, Asn-166 to Lys-172, Glu-233 to Ser-243, Leu-311 to Glu-322, Asp-331 to Thr-352, Thr-363 to Ala-376, Pro-385 to Pro-390. | AR096: 3, AR089: 3, AR053: 3, AR060: 2, AR033: 2, AR039: 1, AR104: 1, AR055: 1, AR061: 1, AR052: 1 L0766: 8, L0769: 4, L0794: 4, L0803: 4, L0748: 3, L0749: 3, H0266: 2, L0764: 2, H0144: 2, L0777: 2, L0731: 2, H0445: 2, L0596: 2, H0543: 2, H0556: 1, S0116: 1, H0638: 1, H0580: 1, S0045: 1, T0039: 1, S6028: 1, H0267: 1, H0622: 1, L0483: 1, S0036: 1, H0135: 1, H0561: 1, L0761: 1, L0806: 1, L0805: 1, L0657: 1, L0666: 1, S0053: 1, S0330: 1, H0539: 1, S3014: 1, L0779: 1, L0757: 1, L0593: 1, H0542: 1 and S0424: 1. | 431-449, 94-110 |
| 1214 | HBMBF28 | 896325 | 1224 | 185 - 1021 | 2629 | Leu-6 to Glu-11, Thr-13 to Pro-20, Glu-86 to Ala-92, Gln-95 to Leu-104, Glu-110 to Lys-116, Gln-173 to Phe-178, Gln-242 to Glu-261, Arg-267 to Tyr-279. | AR055: 406, AR060: 202, AR033: 149, AR039: 134, AR089: 128, AR061: 101, AR096: 99, AR104: 79, AR053: 73, AR052: 0 H0521: 9, L0508: 4, S0410: 3, S0474: 3, H0413: 3, L0766: 3, L0608: 3, | 66-85, 26-42, 212-228 |

| 1215 | HJPAZ12 | 896370 | 1225 | 242 - 1048 | 2630 | Leu-35 to Arg-41, Pro-46 to Leu-58, Phe-62 to Asp-73, Lys-101 to Phe-117, Tyr-134 to Trp-140. | H0543: 3, H0637: 2, H0580: 2, H0492: 2, H0635: 2, L0483: 2, L0498: 2, L0509: 2, L0602: 2, S0206: 2, L0747: 2, L0588: 2, L0589: 2, H0224: 1, H0346: 1, S0360: 1, S0408: 1, H0728: 1, S0046: 1, S0476: 1, H0411: 1, H0497: 1, H0632: 1, H0486: 1, H0253: 1, H0581: 1, H0421: 1, T0115: 1, H0271: 1, T0041: 1, H0641: 1, H0529: 1, L0451: 1, L0369: 1, L0794: 1, L0657: 1, L0493: 1, L0515: 1, L0793: 1, L0663: 1, H0518: 1, H0436: 1, S3012: 1, L0779: 1, L0758: 1, H0444: 1, S0308: 1, S0436: 1, L0590: 1, L0599: 1 and H0542: 1. AR052: 21, AR089: 21, AR033: 18, AR096: 18, AR060: 17, AR055: 16, AR053: 16, AR104: 14, AR061: 14, AR039: 5 L0803: 25, H0046: 8, L0747: 7, L0438: 6, S0212: 5, L0764: 5, L0766: 5, L0439: 5, L0750: 5, L0755: | 186-208, 81-97, 11-27, 168-184 |

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3, L0752: 3, H0543: 3,
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2, H0455: 2, H0586: 2,
H0244: 2, S0010: 2, S0051:
2, H0615: 2, H0598: 2,
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L0770: 2, L0769: 2, L0800:
2, L0804: 2, L0774: 2,
L0775: 2, L0776: 2, L0655:
2, L0666: 2, L0663: 2,
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2, H0648: 2, S0328: 2,
H0521: 2, S0028: 2, L0740:
2, L0749: 2, L0779: 2,
L0777: 2, L0757: 2, L0758:
2, S0031: 2, L0591: 2,
S0026: 2, H0624: 1, H0265:
1, T0002: 1, H0657: 1,
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1, H0484: 1, S0420: 1,
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S0132: 1, S0476: 1, H0619:
1, H0393: 1, H0351: 1,
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1, H0331: 1, H0574: 1,
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1, H0318: 1, H0052: 1,
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1, H0024: 1, H0373: 1,
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1, H0056: 1, H0560: 1,
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1, L0522: 1, L0806: 1,
L0807: 1, L0657: 1, L0634:
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1, H0255: 1, H0662: 1,
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1, H0722: 1, S0476: 1,
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1, H0550: 1, S0222: 1,
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1, H0592: 1, H0587: 1,
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1, H0599: 1, H0042: 1,
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H0634: 1, H0059: 1, H0100:
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1, L0768: 1, L0803: 1,
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1236	HHEFI15	897968	1246	141 - 1040	2651		84-101
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1266	HETHC61	901421	1276	82 - 819	2681	Arg-24 to Leu-33, Lys-42 to Arg-48, Asp-65 to Thr-70, Glu-111 to Leu-119, Gln-129 to Ser-138, Ser-153 to Trp-158, Pro-163 to Asp-175.	AR055: 5, AR061: 4, AR052: 4, AR060: 4, AR089: 4, AR033: 4, AR053: 2, AR039: 2, AR104: 2, AR096: 2 H0046: 3, H0483: 2, S0040: 1, S0356: 1, S0360: 1, S0476: 1, S0222: 1, L0021: 1, H0024: 1, H0494: 1, S0466: 1, S0344: 1, L0761: 1, L0766: 1, L0388: 1, H0593: 1, L0439: 1 and L0757: 1.	L0659: 1, L0382: 1, L0666: 1, L0665: 1, H0702: 1, L0565: 1, H0520: 1, H0658: 1, H0670: 1, H0672: 1, S0328: 1, H0518: 1, H0521: 1, S0406: 1, H0732: 1, S0390: 1, S0037: 1, S0027: 1, L0749: 1, L0750: 1, L0779: 1, L0780: 1, L0752: 1, H0445: 1, H0707: 1 and S0446: 1.	220-246, 1-22
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1271	HTXPO61	901690	1281	83 - 853	2686		
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| 1272 | HLWAM6 2 | 902115 | 1282 | 95 - 895 | 2687 | Lys-14 to Ala-21, Ala-39 to Gly-52. | H0265: 2, H0402: 2, S0356: 2, H0052: 2, H0622: 2, H0644: 2, H0616: 2, L0372: 2, H0547: 2, L0748: 2, L0747: 2, L0756: 2, L0777: 2, L0731: 2, L0758: 2, L0588: 2, L0594: 2, H0295: 1, H0381: 1, H0661: 1, S0418: 1, S0410: 1, S0045: 1, H0614: 1, H0333: 1, H0643: 1, H0486: 1, H0042: 1, T0082: 1, H0178: 1, H0014: 1, H0083: 1, H0356: 1, H0030: 1, H0553: 1, L0055: 1, H0591: 1, H0038: 1, H0040: 1, H0087: 1, H0412: 1, H0059: 1, T0042: 1, H0494: 1, H0529: 1, L0369: 1, L0763: 1, L0770: 1, L0769: 1, L0796: 1, L0651: 1, L0659: 1, L0565: 1, H0520: 1, H0658: 1, H0522: 1, L0741: 1, L0749: 1, L0779: 1 and S0452: 1. AR039: 31, AR104: 27, AR033: 25, AR053: 17, AR096: 13, AR089: 12, AR052: 11, AR060: 9, AR055: 9, AR061: 6 | 52-82 |

| 1273 | HFXLK46 | 902129 | 1283 | 175 - 846 | 2688 | Arg-23 to Ile-31, Ala-112 to Trp-119. | AR096: 2, AR055: 1, AR089: 1, AR060: 1, AR061: 1, AR033: 0, AR039: 0, AR052: 0, AR053: 0, AR104: 0 S0028: 6, S0260: 4, S0282: 3, L0005: 2, L0476: 2, S0278: 2, H0318: 2, S0144: 2, H0542: 2, H0624: 1, H0171: 1, S0134: 1, S0180: 1, S0354: 1, S0045: 1, S0049: 1, H0416: 1, H0617: 1, S0036: 1, H0164: 1, S0150: 1, S0428: 1, S0216: 1, S0044: 1, S0146: 1 and S0031: 1. | | | | 41-69, 1-21, 62-79, 149-165, 82-98 |
| 1274 | HBMXK78 | 902144 | 1284 | 490 - 816 | 2689 | Lys-12 to Phe-17, Leu-67 to Trp-81. | AR096: 7, AR033: 7, AR089: 6, AR060: 5, AR053: 5, AR052: 5, AR055: 4, AR104: 3, AR061: 2, AR039: 1 L0754: 7, L0599: 4, L0805: 3, H0716: 2, S0046: 2, H0545: 2, H0615: 2, H0529: 2, L0794: 2, H0539: 2, H0478: 2, L0777: 2, L0752: 2, H0170: 1, S0116: 1, S0360: 1, S0408: 1, H0728: 1, H0351: 1, H0331: 1, H0156: 1, H0599: 1, | | | | 79-98 |

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| 1275 | HE8TF48 | 902236 | 1285 | 205 - 1476 | 2690 | Met-1 to Cys-6, Ala-41 to Tyr-49, Lys-76 to Lys-84, Ser-197 to Lys-208, Pro-213 to Thr-220, Gln-286 to Lys-294, Ala-375 to Arg-391, Leu-397 to Thr-423. | AR061: 2, AR060: 2, AR033: 1, AR089: 1, AR055: 1, AR096: 0, AR039: 0, AR052: 0, AR053: 0 L0803: 4, L0777: 4, L0157: 3, L0794: 3, L0766: 3, L0776: 3, L0758: 3, H0013: 2, H0251: 2, L0471: 2, H0051: 2, S0003: 2, S0036: 2, L0598: 2, L0805: 2, L0655: 2, L0789: 2, L0666: 2, H0521: 2, L0747: 2, L0756: 2, L0779: 2, L0759: 2, L0591: 2, L0362: 2, H0422: 2, S0218: 1, H0656: 1, H0661: 1, H0638: 1, S0418: 1, S0356: 1, S0354: 1, S6022: 1, H0600: 1, H0587: 1, H0574: 1, | H0575: 1, T0082: 1, H0581: 1, H0230: 1, H0196: 1, H0350: 1, S0051: 1, H0266: 1, H0553: 1, H0090: 1, H0647: 1, S0426: 1, L0643: 1, L0363: 1, L0766: 1, S0374: 1, S0126: 1, H0522: 1, S0390: 1, L0740: 1, L0756: 1, L0753: 1, L0755: 1 and S0026: 1. | 51-76, 302-326, 18-37, 331-353, 108-125, 147-167, 228-245, 125-141, 355-372, 268-284 |

| 1276 | HMUAL57 | 902291 | 1286 | 181 - 957 | 2691 | Gln-180 to His-187, Arg-191 to Lys-196. | S0010: 1, H0052: 1, H0596: 1, H0327: 1, H0178: 1, H0355: 1, H0266: 1, H0328: 1, H0268: 1, H0056: 1, H0623: 1, S0150: 1, S0142: 1, S0344: 1, UNKWN: 1, L0646: 1, L0764: 1, L0363: 1, L0767: 1, L0386: 1, L0774: 1, L0775: 1, L0659: 1, H0660: 1, H0648: 1, S0328: 1, S0152: 1, H0522: 1, S0392: 1, S0028: 1, L0751: 1, H0445: 1 and L0599: 1. | AR039: 34, AR052: 21, AR104: 20, AR096: 17, AR053: 17, AR033: 15, AR089: 15, AR060: 12, AR055: 10, AR061: 9, S0364: 1, H0529: 1, L0764: 1, L0806: 1, L0657: 1, L0809: 1, H0690: 1 and S0152: 1. | 222-241, 122-147, 24-42, 66-85, 202-218, 149-165 |
| 1277 | HWCAD85 | 902684 | 1287 | 250 - 1182 | 2692 | Pro-6 to Gly-25, Lys-37 to Ala-55, Phe-107 to Phe-117, Ser-133 to Pro-139, Ile-149 to Cys-156, Gln-169 to Ile-176, | AR060: 8, AR096: 4, AR052: 4, AR053: 2, AR039: 2, AR033: 2, AR089: 2, AR061: 2, AR055: 1, AR104: 1, H0521: 4, L0599: 4, | | 223-239, 71-87, 269-285, 183-199 |

1278	HLWCJ37	902841	1288	295 - 954	2693			
						Leu-301 to Pro-310.	T0049: 3, L0659: 3, H0539: 3, L0748: 3, L0755: 3, H0069: 2, H0038: 2, S0144: 2, S0142: 2, S0344: 2, L0770: 2, L0662: 2, L0775: 2, L0744: 2, L0752: 2, L0758: 2, L0759: 2, L0588: 2, H0650: 1, H0254: 1, H0402: 1, H0638: 1, S0418: 1, H0580: 1, S0278: 1, H0013: 1, H0581: 1, H0310: 1, H0687: 1, S0294: 1, S0426: 1, L0644: 1, L0768: 1, L0766: 1, L0774: 1, L0790: 1, L0666: 1, L0665: 1, S0126: 1, S0152: 1, H0522: 1, L0779: 1, L0777: 1, H0445: 1, S0276: 1 and H0423: 1.	157-187, 44-65, 184-202, 87-103, 121-138
						Ser-70 to Asn-76, Pro-144 to Gly-157.	AR039: 12, AR096: 9, AR089: 9, AR053: 8, AR033: 7, AR104: 6, AR052: 6, AR060: 6, AR055: 6, AR061: 3 L0755: 8, L0804: 5, L0805: 4, L0777: 4, H0014: 3, S0360: 2, H0581: 2, H0553: 2, S0344: 2, S0374: 2, H0672: 2, L0362: 2, H0662: 1, S0356: 1, S0444:	

| 1279 | HUFDC04 | 903101 | 1289 | 120 - 668 | 2694 | Tyr-164 to Leu-169, Thr-175 to Lys-183. | AR089: 2, AR033: 2, AR096: 2, AR055: 2, AR104: 2, AR052: 1, AR061: 1, AR060: 1, AR053: 0, AR039: 0 L0748: 12, L0777: 5, L0769: 4, L0774: 4, L0740: 4, H0556: 3, H0619: 3, H0494: 3, S0126: 3, L0754: 3, H0052: 2, H0620: 2, H0024: 2, H0617: 2, L0770: 2, H0521: 2, S0206: 2, L0591: 2, H0667: 2, H0265: 1, H0713: 1, H0717: 1, H0295: 1, T0049: 1, H0341: 1, H0661: 1, S0420: 1, S0408: 1, S0410: 1, S0046: 1, S0278: 1, H0441: 1, T0039: 1, H0013: 1, H0156: 1, H0309: 1, H0544: 1, H0046: 1, H0099: 1, S0250: 1, H0087: 1, T0069: 1, | 1, H0580: 1, S0278: 1, H0586: 1, H0318: 1, H0251: 1, S0466: 1, S0438: 1, L0763: 1, L0803: 1, L0774: 1, L0657: 1, L0809: 1, L0790: 1, S0328: 1, H0521: 1, L0748: 1, L0749: 1, H0595: 1 and S0424: 1. | 135-160, 98-117, 38-59, 75-91 |

| 1280 | HHEXO15 | 903309 | 1290 | 137 - 547 | 2695 | Leu-29 to Thr-36, Phe-85 to Asn-96. | S0438: 1, S0440: 1, H0131: 1, S0422: 1, L0369: 1, L0520: 1, L0772: 1, L0641: 1, L0764: 1, L0803: 1, L0775: 1, L0806: 1, L0805: 1, L0384: 1, L0666: 1, S0374: 1, H0682: 1, H0658: 1, H0696: 1, S0392: 1, S3014: 1, S0027: 1, S0028: 1, L0439: 1, L0749: 1, L0750: 1, L0753: 1, L0755: 1, L0731: 1, L0757: 1, L0758: 1, S0434: 1, S0436: 1, L0592: 1, H0665: 1, H0542: 1, H0543: 1 and H0506: 1. AR039: 34, AR104: 27, AR033: 21, AR096: 20, AR089: 15, AR053: 14, AR061: 14, AR060: 13, AR052: 13, AR055: 13, S0278: 15, S0126: 13, L0742: 13, L0758: 10, L0751: 8, L0754: 8, L0747: 8, L0748: 7, H0305: 6, S0360: 6, H0545: 6, L0776: 6, L0744: 6, H0484: 5, H0638: 5, S0007: 5, S0045: 5, H0530: 5, H0617: 5, S0144: 5, L0766: 5, L0805: | 48-80, 106-125, 37-53 |

5, S0027: 5, L0750: 5,
L0757: 5, H0445: 5, H0542:
5, H0657: 4, S0046: 4,
H0370: 4, S0051: 4, H0424:
4, H0087: 4, H0551: 4,
S0142: 4, S0344: 4, L0763:
4, L0764: 4, L0662: 4,
L0768: 4, L0803: 4, L0775:
4, H0539: 4, H0521: 4,
L0743: 4, L0752: 4, L0603:
4, S0040: 3, S0442: 3,
S0358: 3, S0408: 3, H0549:
3, H0486: 3, H0544: 3,
H0150: 3, H0023: 3, H0510:
3, H0646: 3, L0770: 3,
L0771: 3, L0773: 3, L0794:
3, L0774: 3, L0655: 3,
L0659: 3, S0404: 3, S3014:
3, S0028: 3, H0543: 3,
H0422: 3, H0556: 2, S6024:
2, H0295: 2, S0116: 2,
H0341: 2, S0282: 2, S0029:
2, H0661: 2, H0580: 2,
H0441: 2, H0069: 2, L0021:
2, H0599: 2, T0048: 2,
S0049: 2, H0050: 2, H0057:
2, H0033: 2, H0213: 2,
H0181: 2, H0606: 2, H0634:
2, S0426: 2, L0769: 2,
L0639: 2, L0761: 2, L0373:

2, L0646: 2, L0378: 2,
L0806: 2, L0517: 2, S0052:
2, H0670: 2, H0710: 2,
H0522: 2, H0696: 2, L0745:
2, L0756: 2, L0753: 2,
L0755: 2, L0731: 2, S0434:
2, S0436: 2, L0588: 2,
H0653: 2, H0667: 2, S0194:
2, S0196: 2, H0423: 2,
H0352: 2, H0170: 1, H0171:
1, H0265: 1, H0685: 1,
H0713: 1, H0716: 1, H0294:
1, S0114: 1, L0002: 1,
H0656: 1, H0381: 1, H0483:
1, H0402: 1, H0589: 1,
H0125: 1, H0675: 1, H0728:
1, S0132: 1, S6022: 1,
S0222: 1, H0392: 1, H0607:
1, H0592: 1, H0586: 1,
H0333: 1, H0492: 1, T0114:
1, S0280: 1, T0082: 1,
H0618: 1, H0253: 1, S0010:
1, H0581: 1, H0251: 1,
H0309: 1, H0234: 1, H0327:
1, H0546: 1, H0178: 1,
H0567: 1, H0081: 1, H0012:
1, H0024: 1, H0083: 1,
H0594: 1, H0266: 1, H0179:
1, H0416: 1, H0188: 1,
H0290: 1, H0292: 1, S0003:

| 1281 | HE8NI05 | 903697 | 1291 | 190 - 609 | 2696 | Pro-17 to His-27, Pro-29 to Asn-36, Pro-42 to Cys-52, | 1, H0252: 1, H0328: 1, S0368: 1, H0604: 1, H0553: 1, H0673: 1, H0708: 1, H0316: 1, H0598: 1, H0040: 1, H0063: 1, H0264: 1, H0413: 1, S0038: 1, T0041: 1, H0560: 1, H0625: 1, S0464: 1, S0438: 1, S0440: 1, H0130: 1, H0641: 1, H0529: 1, L0369: 1, L0371: 1, L0772: 1, L0800: 1, L0642: 1, L0644: 1, L0645: 1, L0521: 1, L0364: 1, L5568: 1, L0523: 1, L0653: 1, L0807: 1, L0527: 1, L0636: 1, L0782: 1, L0809: 1, L0529: 1, L0647: 1, L0664: 1, S0428: 1, S0216: 1, H0144: 1, H0520: 1, H0547: 1, H0689: 1, S0378: 1, S0152: 1, S0406: 1, H0187: 1, H0576: 1, S3012: 1, S0206: 1, L0740: 1, L0749: 1, L0779: 1, L0759: 1, L0605: 1, L0608: 1, S0106: 1, H0216: 1, S0192: 1 and S0276: 1. AR055: 3, AR060: 3, AR052: 2, AR053: 2, AR033: 2, AR089: 2, | 79-109 |

1282	H2CBP53	903718	1292	73 - 1290	2697	Asp-60 to Asn-73.	AR061: 2, AR104: 1, AR096: 1, AR039: 1, L0666: 3, L0776: 2, L0750: 2, S0222: 1, H0497: 1, H0013: 1, H0009: 1, S0214: 1, H0124: 1, H0090: 1, L0792: 1, H0547: 1, H0519: 1, H0659: 1, L0777: 1, L0758: 1, L0589: 1 and L0608: 1.			71-98, 363-388, 110-126, 254-270, 282-298, 48-64, 305-321, 132-148
						Glu-3 to Arg-12, Glu-18 to Gln-42, Pro-158 to Asp-164, Asp-170 to Glu-175.	AR039: 13, AR089: 13, AR096: 13, AR033: 12, AR052: 11, AR053: 10, AR060: 9, AR055: 7, AR061: 6, AR104: 5	1q21.2-q22	104770, 107670, 110700, 145001, 146760, 146790, 159440, 159440, 159440, 186780, 191030, 191315, 600923, 601412, 601652, 601863, 602491	
1283	HDPPP18	903850	1293	707 - 1249	2698	Glu-52 to Thr-57, Lys-112 to Lys-117.	AR039: 38, AR089: 19, AR096: 19, AR053: 19,			22-40, 139-162,

ID	Name	Gene No.	SEQ ID	NT region	AA SEQ	Amino acid regions	Counts	Chromosome	Accessions	AA positions
							AR033: 17, AR104: 16, AR052: 13, AR060: 12, AR055: 11, AR061: 8 H0553: 2, H0521: 2, H0580: 1, H0641: 1 and H0522: 1.			116-136, 89-109
1284	HSLFD86	903930	1294	1468 - 443	2699	Asp-58 to Glu-64, Asp-162 to Gly-167.	AR096: 3, AR089: 1, AR060: 1, AR061: 1, AR055: 1, AR052: 1, AR039: 1, AR033: 1, AR053: 1, AR104: 0 S0028: 3, H0295: 1, S0045: 1, H0632: 1, S0050: 1, H0271: 1, H0100: 1, S0150: 1 and S0052: 1.			107-123
1285	HTLDD85	904049	1295	125 - 868	2700	Gly-8 to Trp-73, Leu-75 to Lys-80, Arg-169 to Met-174, Phe-203 to Lys-210, Pro-216 to Lys-248.	AR055: 17, AR039: 11, AR053: 9, AR060: 9, AR052: 9, AR033: 8, AR089: 7, AR061: 7, AR096: 6, AR104: 4 H0616: 14, H0038: 12, H0618: 6, H0253: 5, L0758: 5, L0768: 4, H0411: 2, L0779: 2, L0151: 1, L0697: 1 and S0398: 1.			173-198, 148-170, 91-113, 112-133
1286	HDTIZ68	904058	1296	167 - 1021	2701	Met-1 to Arg-11, Leu-16 to Lys-23, Pro-32 to Gly-45, Pro-118 to Ala-134,	AR096: 6, AR052: 3, AR053: 3, AR033: 2, AR089: 2, AR060: 2, AR055: 2, AR104: 1,	13q32-34	153900, 156600, 180381, 227500,	43-71, 216-232

1287	HDAAV92	904116	1297	92 - 727	2702			66-90, 46-67
						Gly-137 to Val-142, Ser-153 to Ser-162, Leu-178 to Asn-183, Met-236 to Tyr-246.	AR061: 1, AR039: 0 H0423: 6, H0638: 3, H0560: 3, H0529: 3, H0521: 3, H0445: 3, L0362: 3, S0356: 2, S0358: 2, H0486: 2, H0581: 2, L0695: 2, H0412: 2, L0770: 2, L5568: 2, S0328: 2, L0748: 2, L0756: 2, L0777: 2, H0422: 2, H0624: 1, S0116: 1, H0341: 1, H0402: 1, H0125: 1, S0360: 1, H0574: 1, L0105: 1, H0318: 1, S0474: 1, H0421: 1, L0041: 1, H0179: 1, H0688: 1, H0622: 1, H0038: 1, H0488: 1, H0641: 1, S0142: 1, S0344: 1, L0369: 1, L0794: 1, L0766: 1, L0804: 1, L0784: 1, L0776: 1, L0663: 1, S0428: 1, H0435: 1, H0522: 1, H0134: 1, S0028: 1, L0740: 1, L0751: 1, L0754: 1, L0749: 1, L0750: 1, L0731: 1, L0757: 1, H0343: 1, S0196: 1 and H0542: 1.	227600, 232000, 238970, 256731, 602085
						His-13 to His-34, Lys-113 to Leu-122, Gly-151 to Trp-161.	AR039: 9, AR052: 5, AR053: 4, AR096: 3, AR089: 2, AR061: 2, AR055: 2, AR060: 2,	

AR033: 2, AR104: 1
H0046: 17, S0358: 9,
L0748: 9, H0590: 8, L0766:
7, H0574: 6, L0764: 6,
L0659: 6, L0663: 6, L0749:
5, S0442: 4, L0755: 4,
L0601: 4, S0360: 3, H0036:
3, L0761: 3, L0794: 3,
H0657: 2, S0444: 2, S0408:
2, H0263: 2, H0510: 2,
H0622: 2, H0560: 2, S0002:
2, H0529: 2, L0372: 2,
L0800: 2, L0649: 2, L0803:
2, L0791: 2, L0666: 2,
S0374: 2, H0690: 2, L0777:
2, L0596: 2, H0423: 2,
H0556: 1, H0713: 1, H0583:
1, H0650: 1, S0354: 1,
S0376: 1, H0580: 1, H0619:
1, H0497: 1, H0632: 1,
H0069: 1, L0022: 1, H0575:
1, H0014: 1, H0266: 1,
H0271: 1, H0416: 1, S0003:
1, H0111: 1, H0038: 1,
H0616: 1, H0625: 1, H0561:
1, S0440: 1, H0646: 1,
S0426: 1, L0770: 1, L0769:
1, L0667: 1, L0772: 1,
L0373: 1, L0645: 1, L0768:
1, L0533: 1, L0804: 1,

| 1288 | HDPGH33 | 904204 | 1298 | 257 - 1186 | 2703 | Ser-44 to Ser-64, Glu-84 to Ile-90, Pro-93 to Gly-108, Leu-122 to Thr-129, Ser-183 to Gly-188, Thr-191 to Ser-208, Pro-214 to Thr-223, Arg-283 to Gly-288, Asp-293 to Ser-310. | AR052: 3, AR096: 1, AR055: 1, AR039: 1, AR089: 1, AR060: 0, AR061: 0, AR104: 0, AR053: 0, AR033: 0 S0410: 5, S0358: 4, L0759: 4, S0444: 3, H0599: 3, L0803: 3, L0774: 3, H0521: 3, H0638: 2, S0354: 2, S0408: 2, H0580: 2, H0674: 2, L0761: 2, L0764: 2, L0659: 2, L0809: 2, L0789: 2, L0438: 2, H0522: 2, S0434: 2, H0717: 1, S0376: 1, H0586: 1, H0485: 1, H0013: 1, S0003: 1, H0039: 1, T0006: 1, S0386: 1, H0560: 1, S0440: 1, L0800: 1, L0662: 1, L0783: 1, L0790: 1, S0330: 1, H0696: 1, L0779: 1, L0777: 1, L0755: 1, L0758: 1 and | L0775: 1, L0527: 1, L0783: 1, L0809: 1, L0664: 1, L0438: 1, H0660: 1, H0521: 1, S0404: 1, S0406: 1, L0751: 1, L0747: 1, L0750: 1, L0756: 1, L0780: 1, H0707: 1, S0011: 1 and H0422: 1. | 252-283, 4-20 |

1289	HHEPR52	904360	1299	146 - 568	2704		83-116, 1-19
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2, L0650: 2, L0774: 2,
L0775: 2, L0375: 2, L0776:
2, L0513: 2, L0526: 2,
L0518: 2, L0382: 2, L0541:
2, L0664: 2, H0521: 2,
L0741: 2, L0743: 2, L0744:
2, L0745: 2, L0731: 2,
L0361: 2, L0601: 2, H0668:
2, H0170: 1, H0556: 1,
H0716: 1, S0212: 1, H0484:
1, S0356: 1, S0354: 1,
S0444: 1, H0580: 1, S0007:
1, L0717: 1, S0278: 1,
S0222: 1, S6014: 1, H0392:
1, H0438: 1, H0587: 1,
H0497: 1, H0574: 1, H0559:
1, H0486: 1, H0013: 1,
H0427: 1, H0156: 1, L0021:
1, H0590: 1, H0618: 1,
S0010: 1, H0194: 1, H0309:
1, H0544: 1, H0546: 1,
H0150: 1, H0011: 1, H0510:
1, H0375: 1, S6028: 1,
H0687: 1, H0039: 1, H0181:
1, H0617: 1, H0673: 1,
S0364: 1, H0708: 1, S0038:
1, T0041: 1, T0042: 1,
L0475: 1, H0560: 1, H0625:
1, H0131: 1, H0646: 1,
S0210: 1, L0762: 1, L0763:

1290	HSYDY88	904381	1300	161 - 1861	2705			325-345
					Ser-16 to Ala-29, Asp-49 to Ser-54, Pro-78 to Ala-86, Arg-113 to Gly-120, Gly-170 to Pro-194, Ala-220 to Ser-227, Asp-256 to Pro-261, Glu-300 to Glu-305, Gly-322 to Pro-328, Tyr-389 to Glu-399, Gln-423 to Glu-431,	AR061: 4, AR089: 3, AR033: 3, AR104: 2, AR053: 2, AR096: 1, AR060: 1, AR052: 0, AR039: 0, AR055: 0 H0124: 28, H0013: 8, H0547: 4, H0144: 3, L0595: 3, H0390: 2, S0346: 2, H0012: 2, L0565: 2, L0777: 2, S0001: 1, S0282: 1, S0442: 1, H0619: 1, S0222:	1, L0770: 1, L0796: 1, L3904: 1, L5565: 1, L3905: 1, L0761: 1, L0772: 1, L0645: 1, L0662: 1, L0363: 1, L0768: 1, L0794: 1, L0804: 1, L0806: 1, L0805: 1, L0653: 1, L0493: 1, L0517: 1, L0782: 1, L0783: 1, L0647: 1, L0789: 1, L0790: 1, H0593: 1, H0689: 1, H0690: 1, S0330: 1, S0044: 1, H0694: 1, H0555: 1, H0626: 1, L0756: 1, L0753: 1, L0755: 1, H0445: 1, S0434: 1, L0592: 1, L0608: 1, L0593: 1, S0196: 1, H0543: 1, H0422: 1, S0424: 1, S0456: 1, H0506: 1 and H0008: 1.	

1291	HHFCW31	904399	1301	395 - 1516	Asp-488 to Gly-494, Arg-507 to Ile-512, Ser-515 to Arg-521, Ser-548 to Asn-554.	1, H0333: 1, T0039: 1, S0010: 1, S0049: 1, H0052: 1, H0546: 1, H0178: 1, H0566: 1, H0081: 1, H0024: 1, S0388: 1, S0051: 1, H0292: 1, H0135: 1, H0591: 1, H0087: 1, H0551: 1, S0038: 1, H0100: 1, L0770: 1, L0521: 1, L0651: 1, L0543: 1, L0664: 1, H0520: 1, S3012: 1, S0028: 1, L0439: 1, L0759: 1, H0445: 1, L0592: 1, L0599: 1 and H0352: 1.		316-346, 12-40, 306-322
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1292	HEOPR46	904471	1302	215 -	Arg-40 to Asp-46,	AR052: 37, AR096: 34,		69-94, 21-

| 1293 | HDPIF47 | 904473 | 1303 | 598 | | Gln-106 to Ala-114. | AR053: 21, AR089: 17, AR033: 15, AR104: 14, AR039: 11, AR060: 10, AR061: 2, AR055: 1 H0457: 4, L0766: 3, L0771: 2, L0789: 2, H0556: 1, H0656: 1, H0486: 1, H0009: 1, L0646: 1, L0768: 1, L0794: 1, L0655: 1, L0809: 1, H0701: 1, L0747: 1, L0758: 1, H0707: 1 and H0542: 1. | 37, 88-104, 49-65, 1-17 |
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1294	HKAIP13	904639	1304	823 - 1938	2709		247-276
					Arg-26 to Cys-32, Val-108 to Lys-132, Glu-193 to Tyr-198, Pro-232 to Asn-249,	1, S0444: 1, S0360: 1, H0637: 1, H0580: 1, H0734: 1, H0619: 1, H0586: 1, H0574: 1, H0427: 1, L0021: 1, H0575: 1, H0318: 1, H0545: 1, H0024: 1, H0373: 1, H0071: 1, H0179: 1, S0214: 1, H0428: 1, H0674: 1, H0591: 1, H0616: 1, H0488: 1, H0494: 1, S0438: 1, S0440: 1, H0647: 1, S0142: 1, UNKWN: 1, L0369: 1, L0763: 1, L0769: 1, L0646: 1, L0648: 1, L0662: 1, L0650: 1, L0775: 1, L0805: 1, L0653: 1, L0776: 1, L0656: 1, L0782: 1, L0809: 1, L0519: 1, S0052: 1, H0144: 1, H0520: 1, H0547: 1, H0660: 1, S0380: 1, L0742: 1, L0439: 1, L0750: 1, L0777: 1, S0031: 1, H0445: 1, S0434: 1, H0665: 1, H0667: 1, S0194: 1, S0276: 1 and S0458: 1. AR052: 5, AR089: 4, AR039: 4, AR104: 3, AR053: 3, AR060: 3, AR033: 2, AR096: 2,	

| 1295 | HLWEP76 | 904673 | 1305 | 151 - 1740 | 2710 | Ser-23 to Gln-40, Pro-140 to Tyr-145, Glu-175 to Ala-182, Thr-229 to Lys-240, Arg-265 to Glu-277, Gly-454 to Cys-460, Ile-494 to Lys-504, Gly-517 to Thr-524. | AR096: 4, AR033: 3, AR039: 2, AR061: 2, AR104: 2, AR052: 1, AR055: 1, AR060: 1, AR089: 0 H0553: 8, L0754: 8, L0603: 8, L0794: 6, L0758: 6, L0809: 5, S0358: 4, L0769: 4, H0030: 3, L0755: 3, H0265: 2, H0556: 2, S0278: 2, H0549: 2, L0789: 2, L0438: 2, L0750: 2, H0722: 1, S0132: 1, H0550: 1, H0586: 1, H0486: 1, H0635: 1, L0022: 1, H0318: 1, H0310: 1, H0052: 1, H0150: 1, H0009: 1, H0622: 1, H0031: 1, H0040: 1, H0494: 1, H0641: 1, H0647: 1, L0643: 1, L0764: 1, L0649: 1, L0804: 1, L0659: 1, L0793: 1, L0747: 1, | 238-266, 465-494, 357-378, 378-405, 114-136, 293-310, 329-347, 57-73, 146-162, 425-441, 188-204, 79-95 |

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1296	HTLIT05	904861	1306	153 - 1040	2711	Leu-24 to Thr-31, Lys-92 to Leu-99, Arg-111 to Trp-116, Arg-118 to Thr-128, Thr-162 to Asn-168, Thr-198 to Asp-204.	AR089: 9, AR096: 7, AR060: 5, AR053: 5, AR039: 5, AR055: 4, AR052: 4, AR104: 3, AR061: 3, AR033: 3 H0618: 2, H0040: 1 and H0522: 1.	L0756: 1, S0260: 1, H0665: 1 and L0698: 1.	36-55, 261-281, 204-220
1297	HPTZB93	904877	1307	267 - 935	2712	Asn-24 to Gly-34, Ala-42 to His-57, Trp-68 to Tyr-76, Pro-88 to Gly-94, Phe-109 to Glu-122, Gln-152 to Asp-161, Leu-207 to Gly-215.	AR052: 49, AR096: 44, AR053: 39, AR089: 34, AR039: 30, AR061: 27, AR104: 23, AR055: 21, AR033: 20, AR060: 18 L0805: 50, L0776: 30, L0789: 8, L0750: 4, L0769: 3, L0809: 3, H0424: 2, L0794: 2, L0731: 2, H0231: 1, H0213: 1, H0418: 1, S0370: 1, L0768: 1, L0659: 1, L0788: 1, L0779: 1 and L0758: 1.		170-186, 6-22, 134-150, 93-109
1298	HWLAJ33	904911	1308	270 - 887	2713	Pro-22 to Gly-28, Gln-32 to Gln-38, Ser-105 to Phe-113, Cys-149 to Tyr-155, Ser-186 to His-193, Gln-196 to Trp-205.	AR053: 197, AR052: 188, AR096: 184, AR089: 119, AR104: 98, AR039: 83, AR060: 77, AR033: 73, AR061: 57, AR055: 49 L0748: 5, H0581: 4, H0393: 3, H0250: 2, S0374:		42-72, 87-105, 125-141

1299	HAGFD47	904977	1309	357 - 1154	2714	Thr-187 to Lys-192, Asn-255 to Leu-262.	2, S0354: 1, H0586: 1, H0013: 1, H0004: 1, H0421: 1, H0031: 1, H0644: 1, H0634: 1, S0144: 1, S0344: 1, L0766: 1, L0657: 1, L0659: 1, H0518: 1, S0044: 1, H0555: 1, L0752: 1 and L0755: 1. AR096: 15, AR053: 12, AR060: 8, AR052: 7, AR089: 7, AR039: 6, AR033: 5, AR055: 5, AR061: 4, AR104: 3 L0439: 6, L0748: 5, L0770: 4, L0771: 4, L0740: 4, H0341: 2, H0596: 2, H0373: 2, H0266: 2, L0766: 2, L0775: 2, L0659: 2, L0663: 2, L0665: 2, S0027: 2, L0601: 2, H0624: 1, H0717: 1, S0114: 1, L0415: 1, L0760: 1, S0116: 1, H0722: 1, H0733: 1, H0411: 1, H0497: 1, H0486: 1, H0427: 1, L0021: 1, S0010: 1, H0318: 1, H0581: 1, H0421: 1, H0744: 1, T0110: 1, H0597: 1, S0003: 1, H0068: 1, H0551: 1, S0440: 1, H0633: 1, S0422: 1, 92-112, 51-74, 153-179, 13-31, 121-137

| 1300 | HSKAS66 | 905017 | 1310 | 106 - 762 | 2715 | Ser-4 to Arg-9, Phe-24 to Tyr-35, Ala-37 to Gly-42, Val-123 to Thr-129, Thr-162 to Ser-167. | AR033: 6, AR061: 4, AR055: 3, AR089: 3, AR096: 3, AR053: 2, AR060: 2, AR052: 2, AR039: 1, AR104: 1 H0529: 8, L0794: 5, S0424: 4, H0559: 3, H0083: 3, L0769: 3, L0809: 3, L0748: 3, L0759: 3, S0192: 3, H0341: 2, H0587: 2, H0266: 2, H0286: 2, H0623: 2, S0422: 2, L0761: 2, L0783: 2, L0565: 2, L0745: 2, L0756: 2, L0777: 2, H0665: 2, H0739: 1, H0265: 1, H0685: 1, H0657: 1, H0484: 1, S0420: 1, S0358: 1, H0592: 1, H0013: 1, H0427: 1, L0021: 1, S0474: 1, H0581: 1, H0597: 1, | S0002: 1, L0763: 1, L0772: 1, L0764: 1, L0773: 1, L0387: 1, L0650: 1, L0655: 1, L0783: 1, L0384: 1, L0529: 1, L0666: 1, H0691: 1, L0438: 1, H0547: 1, H0670: 1, L0754: 1, L0747: 1, L0755: 1, L0758: 1, S0031: 1, H0665: 1, S0276: 1 and H0543: 1. | 141-162, 176-194 |

| 1301 | HOFNT25 | 905050 | 1311 | 2158 - 3012 | 2716 | Glu-8 to Glu-13, Ser-61 to Gly-71, His-118 to Gly-125, Gly-154 to Gln-160, Pro-171 to Arg-177, Arg-200 to Trp-207, Pro-214 to Val-224, Arg-240 to Ser-247. | H0546: 1, H0046: 1, H0086: 1, H0024: 1, H0604: 1, H0181: 1, H0272: 1, S0438: 1, H0647: 1, S0144: 1, L0639: 1, L0372: 1, L0800: 1, L0644: 1, L0766: 1, L0803: 1, L0382: 1, L0787: 1, L0788: 1, L0663: 1, S0374: 1, H0547: 1, H0593: 1, H0521: 1, H0522: 1, S3014: 1, S0027: 1, L0740: 1, L0751: 1, L0746: 1, L0749: 1, L0779: 1, L0757: 1 and S0436: 1. | |
| | | | | | | AR096: 2, AR052: 1, AR060: 1, AR033: 1, AR089: 0, AR061: 0, AR104: 0, AR039: 0, AR055: 0, AR053: 0 L0747: 15, L0758: 7, L0740: 5, L0779: 5, L0534: 3, S0442: 3, S0360: 3, L0769: 3, L0764: 3, L0775: 3, L0776: 3, S0126: 3, L0596: 3, H0663: 2, S0474: 2, H0457: 2, L0157: 2, H0620: 2, L0483: 2, L0803: 2, L0666: 2, L0438: 2, H0696: 2, L0749: 2, L0750: 2, L0756: 2, L0589: 2, | 177-197, 126-142 |